

35. GLAUCIDIUM BRASILIANUM.

Strix brasiliana Gm. Syst. Nat. i. p. 289 (1788).

Carbué Azara, Apunt. i. p. 225. no. xlix. (1802).

Strix ferox Vieill. N. Dict. d'Hist. Nat. vii. p. 22 (1817, ex Azara).

Glaucidium ferox Sharpe, Cat. B. Brit. Mus. ii. p. 200; Berlepsch, J. f. O. 1887, p. 122 (Paraguay).

Glaucidium brasilianum Berlepsch, Bull. B. O. C. xii. p. 8 (1901); Ihering, Revista Mus. Paulista, vi. p. 337.

Glaucidium brasiliense Berlepsch, t. c. p. 8.

Glaucidium ferox rufus Bertoni, Aves Nuev. Paraguay, p. 179 (1901); Ihering, l. c.

a, b. ♂ ad. Sapucay, April and May 1903.

Bill and claws yellow; iris golden. Shot in monte during the day.

c. ♂; *d, e.* ♀ ad. Sapucay, April and June 1904.

The male birds are darker and smaller, while the females are larger and more inclined to rufous in colour.

[This species is resident and by no means uncommon throughout the wooded districts of Central Paraguay. It is often to be met with tame in the native houses, and makes a pleasant little pet when young, but invariably makes for the forest when adult. Of course this is easy enough, as none of the houses are many yards distant from some wood. Although it is not rare I have never met with its nest, and know nothing whatever about its breeding-habits.—*W. F.*]

[To be continued.]

IV.—*On the Birds of Northern Rhodesia and the Katanga District of Congoland.* By S. A. NEAVE, M.A., B.Sc., F.Z.S., M.B.O.U.

(Plates I. & II., and Text-fig. 2.)

THE following paper deals chiefly with the birds that I collected during my second expedition in the years 1907 and 1908; the former year (1907) having been spent in Katanga, and the latter (1908) mainly in the more northern

portions of North-east Rhodesia. I have already recorded the birds collected on the first Expedition in a paper published in the 'Memoirs and Proceedings of the Manchester Literary and Philosophical Society' (vol. 51, pt. iii.). The majority of the species of the first collection, even when not represented by skins, are now again mentioned with additional notes as to their distribution and habits. There are also a few species, mostly of large size, which were observed but of which skins were not brought home.

I have already described the general features of the country traversed and have pointed out* the marked influence which the great Mchinga Escarpment, west of the Luangwa Valley, has upon the distribution of the local fauna. Very many of the birds in the Luangwa Valley at the foot of the Escarpment are characteristically South African, whilst Central-African birds appear immediately the top of the Plateau is reached, with, especially in Katanga, an admixture of species belonging to the tropical West Coast. Apart from special localities, such as Lake Bangweolo which swarms with water-birds, the open plains which are tenanted by many species of Larks and Longclaws, and the patches of dense forest which are full of Ground-Thrushes, Bulbuls, and forest-loving Flycatchers. The most interesting bird-life is, perhaps, to be found in the rather thin woodland which covers a very large proportion of the country.

It is in this woodland that, as Marshall and other observers have pointed out, large parties made up of many species of insectivorous birds are met with. These birds are usually to be found travelling slowly in a definite direction, searching the trees and bushes for insects as they go along. An actual party of this nature observed near Kambove on March 29th, 1907, comprised examples of the following birds:—*Irrisor viridis* (4 or 5), *Rhinopomastus cyanomelas schalowi* (1), *Thamnolæa shelleyi* (2 pairs), *Tchitrea plumbeiceps* (1 pair), *Batis molitor* (several), *Dendropicus hartlaubi* (1 pair), *Salpornis salvadorii* (1), *Parus afer* (1), *Parus rufiventris* (1), and several specimens of *Eremomela* and other Tree-Warblers,

* In a paper read before the Royal Geographical Society (Nov. 22nd, 1909).

Among the bird-inhabitants of this woodland that are much more independent in their habits are the Bush-Shrikes of the genera *Prionops* and *Sigmodus*, which live by themselves in small parties, and the Hornbills of the genus *Lophoceros*, besides a Thrush (*Turdus tropicallis*), which usually prefers a thicket at the foot of a big termites' mound.

The collection made on the second Expedition which is here recorded comprises some 820 skins, in addition to about 560 which were made on the first trip. Except for a few which were snared or trapped by natives, I shot nearly all the birds myself. I managed, however, to depute the bulk of the work of making the skins to natives that I trained for the purpose. The majority of the specimens, including the types, remain in the British Museum.

Before giving a detailed account of the species collected, I must express my deep indebtedness to Dr. R. Bowdler Sharpe, Mr. W. R. Ogilvie-Grant, and Mr. Charles Chubb, of the British Museum, for the great assistance they have afforded me in the identification of a large number of species.

The following Itinerary gives a list of the places visited during the two Expeditions, while the sketch-map (text-fig. 2, p. 80) indicates their position.

First Expedition, 1904-1906.

1904.

Feb. 22-28	Chinde to Tete.
Feb. 29-March 12	Tete to Fort Jameson, N.E. Rhodesia.
March 13-April 18.	Fort Jameson, 4000 feet (rainy season).
April 19-May 6	Fort Jameson to Feira at the junction of the Luangwa and Zambezi Rivers (end of rains).
May 7-Oct. 20	Mid Zambezi and Lower Luangwa Valley 1200-1500 feet (dry season).
Oct. 21-Nov. 9	Up mid-Luangwa Valley, Feira to Petauke (beginning of rains).

1905.

Nov. 10 (1904)-Apr. 26 (1905).	Petauke, east side of Luangwa Valley, 2400 feet (wet season).
April 27-May 20	Mbala country, S.E. of Petauke, 3500 feet.

1905 (*continued*).

May 21-Aug. 31	Low ground in Luangwa Valley, 1400 feet (dry season).
Sept. 1-10	Petauke to Lukashashi River.
Sept. 11-15.....	Edge of Mchinga Escarpment to Mkushi, 4000 feet.
Sept. 16-Oct. 13.....	Ndola and district, N.W. Rhodesia, 4000 feet (early spring).
Oct. 14-28	Upper Kafue Valley and Kapopo, 4000 feet.
Oct. 29-Nov. 24.....	Eastward across southern Serenje district to edge of Mchinga's (beginning of rains).

1906.

Nov. 25 ('05)-Jan. 6 ('06) ..	Petauke and surrounding district.
Jan. 7-14	Petauke to Fort Jameson.

Second Expedition, 1907-1908.

1907.

Jan. 4-12.....	N.W. Rhodesia, Broken Hill to Kapopo, Upper Kafue, 4000 feet (wet season).
Jan. 13-28	Kapopo to Kansanshi, 4999 feet.
Jan. 29-Feb. 3	Kansanshi to Kambove, Congo State.
Feb. 4-March 8	Kansanshi, 4500 feet.
March 9-April 7	Upper Dikulwe Valley, 3500-4000 feet.
April 9-16	High plateau between valleys of Dikulwe and Lualaba, 4500 feet.
April 17-May 13	Low ground in the valley of Kaluli and Lualaba Rivers, 2500-3500 feet (end of rains).
May 14-31	Upper Lualaba Valley, high plateau, 4000 feet.
June 1-9	Upper Lualaba to Kambove.
June 10-28	Upper Lufira Valley, 3500 feet.
June 29-July 16	Kambove.
July 17-24	Kambove to Lukafu, mid-Lufira Valley, 3000 feet.
July 28-Sept. 18	Bunkeya, 3000 feet.
Sept. 19-27.....	Bunkeya to Ruwe.
Sept. 28-Oct. 17	Upper Lufupa River, 3500-4000 feet.
Oct. 18-23	Upper Lubudi River, 3500 feet (early spring, first sign of the rains).
Oct. 24-31	Upper Lufupa River.
Nov. 1-6	Lower Lufupa to Ruwe.
Nov. 7-18	Ruwe to Kambove.
Nov. 19-Dec. 12.....	Through Eastern Katanga, south of bend of Luapula to English boundary, Serenje district, N.E. Rhodesia.
Dec. 13-30	Serenje district, 4500 feet.

1908.

Dec. 30 ('07)–Jan. 2 ('08)..	From edge of Mchinga Escarpment across Luangwa to Petauke.
Jan. 3–13	Petauke.
Jan. 14–21	Petauke to Fort Jameson.
Jan. 22–Feb. 6	Fort Jameson.
Feb. 7–March 31	Up mid and upper Luangwa Valley to Mirongo, 1500–2000 feet (height of rains).
April 1–12	Up Mchinga Escarpment to Chinsali and district, 4500 feet.
April 13–May 20	Mid-Chambezi Valley, 4000 feet (end of rains).
May 21–26	Chambezi to Luena.
May 27–June 20	Luena district and eas shore of Lake Bangweolo.
June 21–July 5	Chishi, Mbawala, and Chirui Islands on Lake Bangweolo, 3900 feet.
July 10–22	Luwingu district, 4300 feet.
July 24–31	Luwingu to Mporokoso, 4500 feet.
Aug. 1–10	Upper Lofu Valley, 4000 feet.
Aug. 11–17	Lower Lofu Valley, 3000–3500 feet.
Aug. 18–27	High plateau between Lofu Valley and Lake Tanganyika, 4000–5000 feet.
Aug. 28–Sept. 3.....	Mporokoso.
Sept. 4–10	Upper Kalungwisi Valley.
Sept. 11–17	Lower Kalungwisi Valley.
Sept. 18–26	High plateau, Kalungwisi district.
Sept. 27–Oct. 1	Luwingu.
Oct. 2–23.....	Luwingu to mouth of Chambezi.
Oct. 24–Nov. 5	Mouth of Chambezi to Lake Young, 4500 feet.
Nov. 6–9	Lake Young to Mpika.
Nov. 10–23	Mpika to Fort Jameson. First rains.

Fam. PHASIANIDÆ.

1. FRANCOLINUS SHELLEYI.

Francolinus shelleyi Grant; Neave, Memoirs & Proc. of the Manchester Lit. & Phil. Society, vol. 51, pt. iii. p. 1.

This bird differs from the allied species in not being an inhabitant of the thickets &c. of river valleys. It is found in the woodland on hills and plateaux.

2. FRANCOLINUS NATALENSIS.

Francolinus natalensis (Smith) ; Neave, loc. cit. p. 2.

This and the following species frequent low ground. I did not meet with either to the west of the Mchinga Escarpment.

3. FRANCOLINUS JOHNSTONI.

Francolinus johnstoni (Shelley); Neave, loc. cit. p. 3.

4. FRANCOLINUS COQUI.

Francolinus coqui (A. Smith); Reich. Vög. Afrikas, vol. i. p. 492; Grant, Cat. Birds B. M. xvii. p. 143 (1893).

No. 220. ♀ ad. Upper Lualaba R., 3800 ft., May 30, 1907.

Bill—yellow base, black tip, brownish horn-colour over nostrils; feet orange-yellow; iris light brown.

I very rarely actually saw this bird, which seems rather shy. Its cry of "Jessee" many times repeated is, however, not infrequently heard in the woodland towards evening.

5. PTERNISTES MELANOGASTER.

Pternistes melanogaster Neum.; Neave, loc. cit. p. 3.

By no means uncommon in the Luangwa Valley. Not a plateau species.

6. PTERNISTES SWAINSONI.

Pternistes swainsoni (Smith); Neave, loc. cit. p. 4.

No. 471. ♂. Lundazi R., Upper Luangwa Valley, 2000 ft., March 3, 1908.

Bill—upper mandible dusky brown; lower mandible, nostrils, and all bare skin on face and neck scarlet; feet dark brown; tarsi reddish brown; iris dark brown.

The same remarks apply to this species as to the last.

7. PTERNISTES CRANCHI.

Pternistes cranchi (Leach); Neave, loc. cit. p. 4.

No. 291. ♂ juv. Bunkeya R., 3000 ft., July 27, 1907.

Bill brownish horn-coloured, lower mandible pinkish; feet salmon-pink; iris brown.

No. 300. ♂ ad. Bunkeya R., July 31, 1907.

Bill brick-red; feet red; iris dark olive-brown; other bare parts red.

No. 301. ♀ ad. Bunkeya R., July 31, 1907.

Bill and feet red; iris dark brown; bare parts red.

No. 304. ♀ ad. Bunkeya R., Aug. 1, 1907.

Bill and feet red ; iris dark brown ; bare parts red.

No. 305. ♀ juv. Bunkeya R., Aug. 1, 1907.

Bill above brownish horn-coloured, below whitish horn-coloured ; feet red ; iris dark olive-brown.

This is the only species of *Pternistes* met with west of the Mchinga Escarpment. It there replaces the two foregoing.

Fam. NUMIDIDÆ.

8. NUMIDA MITRATA.

Numida mitrata Pall. ; Neave, loc. cit. p. 5.

Confined to the Luangwa Valley, and does not surmount the Mchinga Escarpment.

9. NUMIDA MARUNGENSIS.

Numida marungensis Schal. ; Neave, loc. cit. p. 6.

No. 80. ♂. Dikulwe R., 4000 ft., March 13, 1907.

Bill horn-coloured, red at base ; feet dusky chocolate ; iris brown.

No. 306. ♂. Bunkeya R., 3000 ft., Aug. 2, 1907.

Bill horn-coloured, red at base ; feet dark chocolate ; iris dark brown.

No. 673. ♂. Lofu R., L. Tanganyika, 3000 ft., Aug. 17, 1908.

Bill pale whitish horn-coloured, tinted red at base ; feet very dark chocolate-brown ; iris dark hazel.

The other bare parts of this individual, a very old male, were : *cere and ridge above the eye* red ; *casque* orange, becoming horn-coloured at base ; *chin, cheeks*, and around eye and ear pale greenish blue ; *throat* cobalt-blue ; nape and back of neck black, with a few spots of greenish blue at the sides ; *lappets* cobalt-blue tipped with red.

This specimen, which was exceptionally large, measured in the flesh : length 25·5 inches ; wing 12 ; tail 6·75 ; tarsus 3.

10. GUTTERA EDOUARDI.

Guttera edouardi (Hartl.) ; Neave, loc. cit. p. 6.

This bird was confined to the low ground of the Zambezi basin.

Fam. PTEROCLIDÆ.

11. PTEROCLES BICINCTUS.

Pterocles bicinctus (Temm.); Neave, loc. cit. p. 7.

Confined to the Luangwa Valley.

Fam. TRERONIDÆ.

12. VINAGO SCHALOWI.

Vinago schalowi Reich. O. C. 1880, p. 108; id. Vög. Afrikas, vol. i. p. 399.

No. 156. ♀. S. Kalule R., Lualaba Valley, 2500 ft., April 27, 1907.

Bill with crimson base, blue-grey tip; feet orange-yellow, claws grey; iris blue.

No. 159. ♂. Lualaba R., 2400 ft., April 28, 1907.

Bill with crimson base, tip whitish; feet coral-red, claws greyish; iris blue.

No. 282. ♀. Kambove, 4500 ft., July 11, 1907.

Bill greyish white, base scarlet; feet orange; iris blue.

No. 380. ♂. Lufupa R., 4000 ft., Oct. 2, 1907.

Bill—proximal half scarlet, distal half greyish white; feet orange; iris blue.

13. VINAGO WAKEFIELDI.

Vinago wakefieldi Sharpe; Neave, loc. cit. p. 7.

14. VINAGO DELALANDII.

Vinago delalandei (Bonap.); Neave, loc. cit. p. 8.

Fam. PERISTERIDÆ.

15. TURTUR SEMITORQUATUS.

Turtur semitorquatus (Rüpp.); Neave, loc. cit. p. 8.

No. 106. ♀. Dikulwe R., 4000 ft., March 23, 1907.

Bill dusky purplish; feet lilac; iris orange-scarlet, orbit reddish purple.

No. 405. ♀ juv. Lubudi R., 3600 ft., Oct. 19, 1907.

Bill dark brownish; feet dark reddish brown; iris orange-brown, orbit slaty brown.

16. *TURTUR CAPICOLA DAMARENSIS.*

Turtur damarensis Finsch & Hartl. ; Neave, loc. cit. p. 9.

No. 177. ♂. Busanga, Lualaba R., 3000 ft., March 10, 1907.

Bill dusky, tinted with purple at gape ; feet purplish lilac ; iris very dark brown.

No. 249. ♂. Upper Lufira, Katanga's, 3600 ft., June 23, 1907.

Bill black ; feet reddish purple ; iris black.

The last example approaches more nearly to the typical *T. capicola* than to the form *damarensis*.

17. *TURTUR AMBIGUUS.*

Turtur ambiguus Bocage ; Reich. Vög. Afrikas, vol. i. p. 416.

No. 298. ♀. Bunkeya R., 3500 ft., July 30, 1907.

Bill dusky ; feet reddish purple ; iris golden yellow, orbit red.

No. 299. ♂. Bunkeya R., July 31, 1907.

Bill dusky ; feet reddish lilac ; iris pale golden, orbit red.

No. 319. ♀. Bunkeya R., Aug. 13, 1907.

Bill dusky ; feet purplish red ; iris pale golden, orbit red.

This bird is distinctly local. It frequents the banks of rivers on low ground. It is easily recognisable in life by the brick-red colour of the eyelids and skin around the eye.

18. *TURTUR SENEGALENSIS.*

Turtur senegalensis (L.) ; Neave, loc. cit. p. 9.

No. 303. ♂. Bunkeya R., 3500 ft., Aug. 1, 1907.

Bill dusky ; feet pinkish lilac ; iris dark hazel.

No. 334. ♂. Bunkeya R., Aug. 23, 1907.

Bill dusky ; feet amethyst-pink ; iris brown.

This species is ubiquitous, though nowhere abundant.

19. *ÆNA CAPENSIS.*

Æna capensis (L.) ; Neave, loc. cit. p. 10.

Ubiquitous, usually frequents native gardens.

20. TYMPANISTRIA TYMPANISTRIA.

Tympanistria tympanistria (Temm. & Knip); Neave, loc. cit. p. 10.

No. 686. ♂. Lofu Valley, Aug. 26, 1908.

Bill dull purplish; feet dark purple; iris dark brown.

No. 687. ♂. Lofu Valley, L. Tanganyika, 4000 ft., Aug. 26, 1902.

Bill dull purplish; feet rosy purple; iris dark brown.

A distinctly uncommon and shy species in this district. Except in the very early morning and late evening, it is only to be found in dense forest or bush.

21. CHALCOPELIA CHALCOSPILOS.

Chalcopelia chalcospilos (Wagl.); Neave, loc. cit. p. 10.

No. 115. ♂. Dikulwe R., 4000 ft., March 26, 1907.

Bill dark purplish horn-coloured; feet dark magenta; iris brown.

No. 125. Ad. Dikulwe R., March 31, 1907.

Bill lilac purple, tipped with pinkish orange; feet reddish purple; iris dark brown.

No. 327. ♂ juv. Bunkeya R., 3000 ft., Aug. 10, 1907.

Bill dark purplish horn-coloured; feet brownish lilac; iris brown.

No. 650. ♀ juv. Lofu R., L. Tanganyika, 4000 ft., Aug. 8, 1908.

Bill dark purplish; feet dull lilac; iris dark brown.

This species is ubiquitous, and its curious cry, consisting of a scale of descending notes, is an almost invariable accompaniment to a walk in the woodland.

With regard to the difference between *C. afra* and the so-called *C. chalcospilos*, it is of some interest to note that on the Dikulwe River, Katanga, I shot examples of both forms within a few days of each other. The specimen no. 125 has only one purple spot on *one* wing, whereas no. 115 has several green spots.

Fam. RALLIDÆ.

22. CREX EGREGIA.

Crex egregia Peters; Neave, loc. cit. p. 11.

23. LIMNOCORAX NIGER.

Limnocorax niger (Gm.); Neave, loc. cit. p. 11.

No. 288. ♀. Bunkeya R., 3000 ft., July 26, 1907.

Bill greenish yellow; feet salmon-pink; iris and orbit bright red.

Nos. 295, 296. ♂ ♀. Bunkeya R., July 29, 1907.

Bill greenish yellow, tipped with grey; feet coral-red; iris and orbit red.

No. 356. ♂. Bunkeya R., Sept. 3, 1907.

Bill sulphur-yellow, tip greenish yellow; feet red; iris and orbit scarlet.

This bird is hard to shoot, but is numerous on most of the larger rivers.

24. PORPHYRIO PORPHYRIO.

Porphyrio porphyrio (L.); Reich, loc. cit. p. 290.

No. 810. ♀. Lake Young, Nov. 1, 1908.

Bill dull red, base of lower mandible and around nostril whitish; feet and legs salmon-pink, claws brownish; iris reddish brown.

This bird is probably not rare, but often overlooked on account of its retiring habits.

Fam. LARIDÆ.

25. LARUS CIRROCEPHALUS.

Larus cirrocephalus (Vieill.); Reich. Vög. Afrikas, vol. i. p. 44.

No. 604. ♂ ad. Lake Bangweolo, 3800 ft., July 8, 1908.

Bill dull crimson; feet crimson-scarlet; iris creamy white, orbit dull red.

Not uncommon on Lake Bangweolo. There called "Luandwe."

26. RHYNCHOPS FLAVIROSTRIS.

Rhynchops flavirostris Vieill.; Reich, loc. cit. vol. i. p. 76.

This bird is by no means uncommon in small parties, but is never so abundant as on the Upper Shire, Nyasaland. I did not observe it on Lake Bangweolo.

Fam. CHARADRIIDÆ.

27. XIPHIDIPTERUS ALBICEPS.

Xiphidipterus albiceps (Gould) ; Neave, loc. cit. p. 12.

28. LOBIVANELLUS LATERALIS.

Lobivanellus lateralis (A. Smith) ; Reich. Vög. Afrikas, vol. i. p. 194.

No. 817. ♀ ad. Near Lake Young, Mansya R., 4500 ft., Nov. 2, 1908.

Bill bright yellow, the distal third black ; feet and legs pale greenish yellow ; iris pale golden, with an inner ring of grey ; orbit bright yellow ; upper wattle red, lower wattle bright yellow.

This bird occurs sparingly on open plains near water on the High Plateau country.

29. OXYECHUS TRICOLLARIS.

Oxyechus tricollaris (Vieill.) ; Neave, loc. cit. p. 12.

30. ÆGIALITIS TENELLA.

Ægialitis tenellus (Hartl.) ; Neave, loc. cit. p. 13.

31. HIMANTOPUS HIMANTOPUS.

Himantopus himantopus (L.) ; Neave, loc. cit. p. 14.

32. TRINGOIDES HYPOLEUCUS.

Tringoides hypoleucus (L.) ; Sharpe, Cat. B. Brit. Mus. vol. xxiv. p. 456 (1896) ; Reich. loc. cit. vol. i. p. 224.

No. 652. ♂. Lofu R., L. Tanganyika, Aug. 9, 1908.

Bill olive-brown ; feet pale greenish yellow ; iris very dark brown.

No. 808. ♀ ad. Lake Young, Mansya R., Nov. 1, 1908.

Bill brownish ; feet pale olive-yellowish ; iris brown.

33. GLOTTIS NEBULARIUS.

Glottis nebularius (Gunner) ; Neave, loc. cit. p. 14.

34. RHYACOPHILUS GLAREOLA.

Rhyacophilus glareola (Gm.) ; Sharpe, Cat. B. Brit. Mus. xxiv. p. 490.

Totanus glareola Reich. loc. cit. vol. i. p. 222.

No. 497. ♂. Chambezi Valley, 4000 ft., April 15, 1908.

Bill dusky, base of lower mandible greenish yellow; feet and tarsi greenish yellow; iris dusky.

No. 709. ♂. Kalungwisi R., 4000 ft., Sept. 9, 1908.

Bill dusky, base of lower mandible greenish yellow; feet and legs greenish yellow; iris dusky.

Nos. 736, 737, 740. ♀ ♀. Machinga Plateau, Kalungwisi District, 4000 ft., Sept. 19, 20, 1908.

Bill dusky olive at base; feet dull green; tarsi dirty yellow; iris dark brown.

No. 797. ♀. Lulingila R., E. of L. Bangweolo, Oct. 26, 1908.

Bill dusky, greenish olive at base; feet pale greenish olive; iris very dark brown.

35. *ROSTRATULA CAPENSIS.*

Rostratula capensis (L.); Neave, loc. cit. p. 15.

This bird was abundant on the partially flooded plains to the east of Bangweolo, in June and July.

Fam. PARRIDÆ.

36. *ACTOPHILUS AFRICANUS.*

Actophilus africanus (Gm.); Neave, loc. cit. p. 15.

No. 601. ♀. Lake Bangweolo, 3800 ft., July 6, 1908.

Bill and frontal shield blue-grey; feet bluish grey; iris dark brown.

No. 777. ♂. E. shore of L. Bangweolo, 3800 ft., Oct. 15, 1908.

Bill and frontal shield blue-grey; feet greenish slate-coloured; iris dark brown.

Usually very abundant in suitable localities. It is called "Tantamaungi" on Lake Bangweolo.

37. *MICROPARRA CAPENSIS.*

Microparra capensis (A. Smith); Reich. loc. cit. vol. i. p. 270.

No. 503. ♂. Chambezi Valley, 4000 ft., April 17, 1908.

Bill brownish olive; feet pale yellowish olive; iris brown.

No. 504. ♀. Chambezi Valley, April 17, 1908.

Bill brownish olive; feet greenish olive; iris brown.

I only met with this bird on a large swamp called Nashinga in the Upper Chambezi Valley. It takes to wing more readily and flies more strongly than *Actophilus africanus*.

Fam. GLAREOLIDÆ.

38. GLAREOLA PRATINCOLA.

Glareola pratincola (L.); Sharpe, Cat. B. Brit. Mus. xxiv. p. 53.

Glareola fusca Reich. loc. cit. vol. i. p. 144.

Nos. 707, 708. ♂ ♀. Kalungwisi R., 4000 ft., Sept. 9, 1908.

Bill—distal half black, proximal half scarlet; feet and iris dark brown.

This bird occurred sparingly, feeding on the newly burnt ground, on the plains of the Kalungwisi Valley, in September, and again near L. Young at the beginning of November. I never saw it elsewhere.

39. GALACTOCHRYSEA EMINI.

Galactochrysea emini (Shell.); Sharpe, Cat. B. Brit. Mus. xxiv. p. 171.

Glareola emini Reich. loc. cit. vol. i. p. 147.

No. 407. ♂. Lubudi R., 3800 ft., Nov. 22, 1907.

Bill—culmen and tip of both mandibles black, remainder scarlet; feet dusky red; tarsi scarlet; iris dusky.

No. 430. ♀. Lufupa R., 3500 ft., Nov. 3, 1907.

Bill—tip black, base and gape scarlet; feet dusky red; tarsi scarlet; iris brown.

This handsome little bird is not uncommon in rocky places on the upper waters of the rivers Lualaba, Lufupa, and Lubudi.

Specimen no. 430 contained a fully developed egg. This is of the usual *Glareola* type, being white, thickly covered with distinct spots and scribblings of blackish brown and underlying smudges of purplish grey.

The egg measures axis 1·3 inch, diameter 0·9.

Fam. CURSORIIDÆ.

40. RHINOPTILUS SEEBOHMI.

Rhinoptilus seebohmi Sharpe ; Neave, loc. cit. p. 16.

No. 476. ♂. Upper Luangwa, 2000 ft., March 7, 1908.

Bill—base, gape, and orbit sulphur-yellow, culmen and tip blackish; feet and tarsi pale yellowish, toes darker; iris dark brown.

Only met with in the Luangwa Valley, where it is common.

41. RHINOPTILUS CHALCOPTERUS.

Rhinoptilus chalcopterus (Temm.) ; Neave, loc. cit. p. 16.

No. 212. ♀. Upper Lualaba, 3500 ft., May 25, 1907.

Bill dusky, base of lower mandible and gape purplish; feet dusky, legs pinkish purple; iris dark brown; orbit crimson.

No. 818. Juv. Mansya R., near Lake Young, 4500 ft., Nov. 2, 1908.

Bill black, base of lower mandible and gape rosy pink; feet pale flesh-pink, darker toward toes; iris dark brown, orbit pink.

Fam. ŒDICNEMIDÆ.

42. ŒDICNEMUS VERMICULATUS.

Œdicnemus vermiculatus (Cab.) ; Neave, loc. cit. p. 16.

So far as my experience goes, this bird is confined to the sand-banks &c. of the Luangwa River.

Fam. OTIDIDÆ.

43. OTIS MELANOGASTER.

Otis melanogaster (Boc.) ; Neave, loc. cit. p. 17.

No. 499. ♂ juv. Chambezi Valley, 4000 ft., April 16, 1908.

Bill greenish yellow, upper surface of upper mandible dusky; feet and legs pale yellowish brown; iris golden brown.

This seems to be almost the only Bustard throughout a considerable portion of the country.

44. OTIS DENHAMI.

Otis denhami Childr. ; Reich. loc. cit. p. 245.

No. 760. ♀. Luena R., E. of L. Bangweolo, 4000 ft., Oct. 7. 1908.

Bill brownish, lower mandible dirty white, tipped with brown ; feet dirty yellowish white ; iris hazel.

This bird occurred sparingly, and usually singly, on the open plains in the Kalungwisi District and to the east of L. Bangweolo. It is shy, and when alarmed runs at a considerable speed. It is easily recognisable at a considerable distance by the bright rufous colour of the back of its neck.

45. OTIS KORI.

Otis kori Burch. ; Reich. loc. cit. vol. i. p. 242.

I saw one of these fine birds on the Upper Lufupa River, near the watershed, in Oct. 1907, but I did not succeed in shooting it.

Fam. GRUIDÆ.

46. BUGERANUS CARUNCULATUS (Gm.) ; Reich. loc. cit. p. 262.

Nos. 508, 509. ♂ ♀. Chambezi Valley, 4000 ft., April 19, 1905.

Bill pale reddish brown, wattled base dull red ; feet and legs black ; iris orange-yellow.

This species is not uncommon in the open country on the High Plateau, especially in the L. Bangweolo district. It is not at all shy. It is usually in pairs, but I have sometimes seen as many as five individuals together.

47. BALEARICA REGULORUM.

Balearica regulorum (Bennett) ; Reich. loc. cit. vol. i. p. 265.

This bird is not uncommon in small parties, especially in low-lying river-valleys. It is frequently to be seen more or less domesticated.

Fam. IBIDIDÆ.

48. IBIS ÆTHIOPICA.

Ibis æthiopica (Lath.) ; Reich. loc. cit. vol. i. p. 321.

This bird occurred in small numbers on Lake Bangweolo and on the Mansya R. near Lake Young. It is extremely wary and difficult to approach.

49. HAGEDASHIA HAGEDASH.

Hagedashia hagedash (Lath.) ; Sharpe, Cat. B. Brit. Mus. xxvi. p. 19.

Theristicus hagedash Reich. loc. cit. vol. i. p. 325.

No. 603. ♀. Lake Bangweolo, July 8, 1908.

Bill dusky, basal half of culmen dull red ; feet dull reddish ; legs and tarsi dusky ; iris pale yellow.

A common inhabitant of wooded spots on river-banks throughout the country. It is usually met with in pairs and is rather wary. Its extremely harsh cry is frequently heard in the early morning or when alarmed. It is called "nga nga" by the natives almost everywhere.

50. PLEGADIS FALCINELLUS.

Plegadis falcinellus (L.) ; Sharpe, Cat. B. Brit. Mus. xxvi. p. 29.

Plegadis autumnalis (Hasselq.) ; Reich. loc. cit. vol. i. p. 329.

No. 735. ♂. Machinga Plateau, Kalungwisi district, 4200 ft., Sept. 19, 1908.

Bill pale olive-grey ; feet dusky ; iris dark brown.

I found this an uncommon bird, occasionally occurring in small numbers on shallow pans in open plains.

Fam. CICONIIDÆ.

51. PSEUDOTANTALUS IBIS.

Pseudotantalus ibis (L.) ; Neave, loc. cit. p. 17.

I never observed this species out of the Luangwa Valley, where it is not uncommon.

52. DISSURA MICROSCELIS.

Dissoura microscelis (Gr.); Reich. loc. cit. p. 347.

No. 414. ♀. Lufupa R., 4000 ft., Oct. 27, 1907.

Bill dusky, culmen and tip dull red; feet dusky, legs dark brownish; iris dull red, outwardly greyish; eyelids black.

I only met with this bird in this one locality, where I saw a few solitary individuals on the plains.

53. CICONIA ALBA.

Ciconia ciconia (L.); Sharpe, Cat. B. Brit. Mus. xxvi. p. 299; Reich. loc. cit. p. 345.

This species is not infrequently seen from November to March. It is usually in very large parties.

54. CICONIA NIGRA.

Ciconia nigra (L.); Neave, loc. cit. p. 18.

55. ANASTOMUS LAMELLIGERUS.

Anastomus lamelligerus (Bonn.); Reich. loc. cit. p. 335.

No. 602. ♀. L. Bangweolo, July 7, 1908.

Bill—the basal half whitish, the rest black; feet black; iris dark brown.

In large flocks on L. Bangweolo, not met with elsewhere. It is locally called "Lushiwa" by the natives.

56. EPHIPIORHYNCHUS SENEGALENSIS.

Ephippiorhynchus senegalensis (Shaw); Reich. loc. cit. vol. i. p. 341.

This bird is common, singly or in pairs, throughout the country wherever there are open plains. It is very wary and difficult to approach.

57. LEPTOPTILUS CRUMENIFERUS.

Leptoptilus crumeniferus (Less.); Neave, loc. cit. p. 18.

I found the Marabou extremely common on the plains in the neighbourhood of Lakes Bangweolo, Mweru, and Tanganyika during August and November.

Fam. SCOPIDÆ.

58. SCOPUS UMBRETTA.

Scopus umbretta (Gm.); Neave, loc. cit. p. 19.

Ubiquitous.

Fam. ARDEIDÆ.

59. ARDEA GOLIATH.

Ardea goliath Cretzschm.; Reich. loc. cit. p. 376.

This fine Heron is not uncommon on Lake Bangweolo and similar spots, but is very shy.

60. ARDEA MELANOCEPHALA.

Ardea melanocephala (Vig. & Childr.); Reich. loc. cit. vol. i. p. 380.

No. 481. ♀. Upper Luangwa R., 2000 ft., March 18, 1908.

Bill—upper mandible and tip of lower dusky, base and gonyes of lower mandible whitish; feet and legs black; iris pale yellow, orbit greenish yellow shaded with dusky.

61. ARDEA PURPUREA.

Ardea purpurea (L.); Reich. loc. cit. vol. i. p. 377.

No. 593. ♂. Lake Bangweolo, July 4, 1908.

Upper mandible brown, lower mandible orange-yellow; feet yellow; tarsi and feet dusky in front, yellow behind; iris yellow, skin in front of eye pale yellow. Called "Mkaza" on L. Bangweolo.

62. MESOPHOYX BRACHYRHYNCHA.

Mesophoyx brachyrhyncha (Brehm); Sharpe, Cat. B. Brit. Mus. xxvi. p. 87.

Herodias brachyrhyncha Reich. loc. cit. vol. i. p. 389.

No. 601. ♂. Lake Bangweolo, July 6, 1908.

Bill orange-yellow; feet and tarsi black; legs dirty yellowish; iris pale yellow; skin around eye pale yellow.

This bird seems to be always gregarious. It is called "Lukowa" on L. Bangweolo, a similar word "Kakowa" being widely used for most species of Egret.

63. HERODIAS ALBA.

Herodias alba (L.); Reich. loc. cit. vol. i. p. 388.

No. 809. ♀. Lake Young, Nov. 1, 1908.

Bill orange yellow ; feet and legs black ; iris pale yellow ; skin around eye greenish yellow.

This bird measured in the flesh : length 41·5 inches, wing 14·1, culmen 5·1, tarsus 5·9.

I found this large Egret very shy. It is usually solitary.

64. NYCTICORAX NYCTICORAX.

Nycticorax nycticorax (L.) ; Reich. loc. cit. vol. i. p. 362.

No. 816. ♀. Mansya R., L. Young, 4500 ft., Nov. 2, 1908.

Bill—upper mandible blackish, base and edges yellow, lower mandible greenish yellow, tipped with black ; feet bright yellow ; iris carmine ; orbit greenish yellow.

Nos. 822, 823. ♂ ♀. Mansya R., Nov. 4, 1908.

Bill black, base yellow ; feet bright yellow ; iris carmine ; orbit yellow.

I met with a large colony of these birds on the shores of Lake Young, but did not observe them elsewhere.

65. NYCTICORAX LEUCONOTUS.

Nycticorax leuconotus (Wagl.) ; Neave, loc. cit. p. 19.

I never met with any other example than that recorded in the paper cited.

66. BUTORIDES ATRICAPILLA.

Butorides atricapilla (Afzel.) ; Neave, loc. cit. p. 19.

This bird is very common on the banks of the Luangwa River. I did not observe it anywhere on the High Plateau.

67. ERYTHROCNUM RUFIVENTRIS.

Erythrocnus rufiventris (Sundev.) ; Neave, loc. cit. p. 20.

No. 498. ♂. Chambezi Valley, 4000 ft., April 16, 1908.

Bill—the proximal half flesh-coloured, the distal black ; feet pinkish flesh-coloured, claws horn-coloured ; iris deep yellow ; orbit yellowish.

Nos. 775, 776. ♀ ♀. E. of L. Bangweolo, 4000 ft., Oct. 15, 1908.

(775) Bill dusky, lower mandible, the basal two-thirds yellow, base of both mandibles and around eye greenish

yellow; feet and tarsi dull yellow, upper surface of toes shaded with dull brown.

(776) Upper mandible dusky, lower yellowish horn-coloured, tipped with dusky; above nostrils and around eyes bright yellow; feet and tarsi dull yellow.

A common inhabitant of swamps in the Bangweolo district.

68. ARDEOLA RALLOIDES.

Ardeola ralloides (Scop.); Neave, loc. cit. p. 20.

No. 592. ♂. L. Bangweolo, July 4, 1908.

Bill dusky above, greenish below; feet greenish yellow; iris yellow, skin around eye yellow.

Very common in the Bangweolo district and other suitable places. It is usually solitary, but sometimes met with in flocks. It is called "Mandogagwa" on L. Bangweolo.

69. ARDEIRALLUS STURMI.

Ardeirallus sturmi (Wagl.); Neave, loc. cit. p. 21.

Fam. PHÆNICOPTERIDÆ.

70. PHÆNICOPTERUS sp. inc.

I never met with Flamingos in the interior. There are, however, always flocks to be seen on the Lower Zambezi and on the seashore at Chinde.

Fam. ANATIDÆ.

71. PLECTROPTERUS GAMBENSIS.

Plectropterus gambensis (L.); Reich. loc. cit. vol. i. p. 134.

No. 819. ♂. Mansya R., L. Young, Nov. 3, 1908.

Bill dull red, both mandibles tipped with whitish; bare skin on face and orbit dull red; feet dirty flesh-coloured; iris hazel.

Not uncommon on the open plains. It is wary and not often to be obtained with a shot-gun.

72. *SARCIDIORNIS MELANONOTA.*

Sarcidiornis melanonota (Penn.) ; Neave, loc. cit. p. 21.

No. 781. ♂ breeding. E. shore of L. Bangweolo, Oct. 17, 1908.

Bill dusky, the tips greyish ; feet dark slate-coloured ; iris dusky.

This bird occurs throughout the country, but seems nowhere very common.

73. *NETTOPUS AURITUS.*

Nettopus auritus (Bodd.) ; Reich, loc. cit. vol. i. p. 127.

No. 480. ♂. Upper Luangwa R., 1600 ft., March 13, 1908.

Bill bright orange tipped with dusky ; feet black ; iris dark brown.

No. 772. ♂. E. shore of L. Bangweolo, 3900 ft., Oct. 15, 1908.

Bill orange-yellow, tip of upper mandible dusky, of lower whitish ; feet black ; iris dark brown.

Common in suitable localities, in pairs or small flocks.

74. *DENDROCYCNA FULVA.*

Dendrocygna fulva (Gm.) ; Neave, loc. cit. p. 22.

75. *ALOPOCHEN ÆGYPTIACUS.*

Alopochen ægyptiacus (L.) ; Neave, loc. cit. p. 21.

Common on all the rivers, usually in pairs.

76. *ANAS UNDULATA.*

Anas undulata (Dubois) ; Reich, loc. cit. vol. i. p. 113.

No. 745. ♀. Machinga Plateau, Kalungwisi district, 4200 ft., Sept. 20, 1908.

Bill orange-yellow, middle of culmen and tip black ; feet very dark brown ; iris dark brown.

This Duck does not seem to be very common in this part of Africa. A few flocks were seen in the Bangweolo and Kalungwisi district.

77. *NETTIUM PUNCTATUM.*

Nettium punctatum (Burchell) ; Neave, loc. cit. p. 22.

Not uncommon on lagoons in the Luangwa Valley, but not met with on the High Plateau.

78. PÆCILONETTA ERYTHORHYNCHA.

Pæcilonetta erythrorhyncha (Gmel.); Reich. loc. cit. vol. i. p. 118.

No. 435. ♂. Upper Lufira R., 4000 ft., Nov. 21, 1907.

Bill amethyst-pink, with a dirty brown stripe on culmen; feet dirty greyish; iris reddish brown.

Widely distributed, but nowhere very common.

79. AYTHYA ERYTHROPTHALMA.

Aythya erythroptalma (Wied); Sharpe, Hand-l. Birds, vol. i. p. 223.

Nyroca capensis Reich. loc. cit. vol. i. p. 108.

No. 782. ♂. E. shore of L. Bangweolo, Oct. 17, 1908.

Bill bluish grey, the tip black; feet dusky, paler on the anterior surface; iris orange, outwardly margined with scarlet.

This bird seems rare in the country traversed. This specimen was shot from among a flock of *Anas undulata*. Native name "Choso."

Fam. PHALACROCORACIDÆ.

80. PHALACROCORAX AFRICANUS.

Phalacrocorax africanus (Gm.); Neave, loc. cit. p. 23.

No. 591. ♀. L. Bangweolo, July 4, 1908.

Bill—ridge dark olive-brown, remainder orange-yellow; feet black; iris bright crimson.

Very abundant everywhere in suitable localities. It prefers rivers with wooded banks. It is called "Munondwe" by the natives of Lake Bangweolo.

Fam. PLOTIDÆ.

81. PLOTUS RUFUS.

Plotus rufus (Daud.); Grant, Cat. B. Brit. Mus. xxvi. p. 412.

Anhinga rufa Reich. loc. cit. vol. i. p. 95.

Nos. 786, 787. ♂♂. Junction of Luansenshi and Chambezi Rivers, Oct. 22, 1908.

Bill olive-brownish, lower mandible yellowish; feet dusky; iris orange-yellow; orbit yellowish.

A very abundant bird on the shores of L. Bangweolô and the river-banks in the neighbourhood. It is usually very tame, and immense numbers are often to be seen crowded together on the bushes by the water-side. Native name "Nondo."

Fam. SERPENTARIIDÆ.

82. SERPENTARIUS SECRETARIUS.

Serpentarius secretarius (Miller); Reich. loc. cit. vol. i. p. 528.

I only saw this remarkable bird on one occasion, and that was on a large open plain in the Kalungwisi district, in September 1908.

Fam. VULTURIDÆ.

83. NECROSYRITES PILEATUS.

Necrosyrtes pileatus (Burchell); Sharpe, Hand-l. Birds, vol. i. p. 243.

No serious attempts were made to collect Vultures. They seem, strange to say, to be entirely absent from a large part of the High Plateau country. This species seems to be the commonest, occurring in the Luangwa Valley in fair numbers.

Fam. FALCONIDÆ.

84. ASTUR POLYZONOIDES.

Astur polyzonoides (Smith); Neave, loc. cit. p. 23.

No. 448. ♂. Near Serenje, N. E. R., 4500 ft., Dec. 18, 1907.

Bill blue-black; cere and gape yellow; claws black; iris pale greenish yellow.

No. 463. ♀. Petauke, Luangwa Valley, 2400 ft., Jan. 11, 1908

Bill black; cere and gape yellow; feet yellow, claws black; iris scarlet.

No. 719. ♀. Kalungwisi R., Sept. 11, 1908.

Bill black; cere and gape yellow; feet orange-yellow; iris orange-scarlet.

This species seems to be the commonest of the smaller birds-of-prey over a wide area.

85. ACCIPITER OVAMPENSIS.

Accipiter ovampensis (Gurney); Neave, loc. cit. p. 24.

86. ACCIPITER MINULLUS.

Accipiter minullus (Daud.); Neave, loc. cit. p. 24.

No. 285. ♀. Bunkeya R., 3000 ft., July 25, 1907.

Bill black; cere and orbit sulphur-yellow; feet yellow; iris orange-yellow.

87. ACCIPITER RUFIVENTRIS.

Accipiter rufiventris (Smith); Reich. loc. cit. vol. i. p. 560.

No. 267. ♂ juv. Kambove, 4500 ft., July 3, 1907.

Bill dusky, base paler; cere and gape orange, somewhat dusky above; feet and tarsi orange, claws black; iris cinnamon-brown.

88. BUTEO DESERTORUM.

Buteo desertorum (Daud.); Reich. loc. cit. vol. i. p. 594.

No. 806. ♂. L. Young, Nov. 1, 1908.

Bill black, cere and gape pale yellow; feet yellow, claws black; iris brown.

89. AQUILA WAHLBERGI.

Aquila wahlbergi Sund.; Sharpe, Hand-l. Birds, vol. i. p. 261.

Hieraëtus wahlbergi Reich. loc. cit. vol. i. p. 581.

No. 96. ♂ juv. Dikulwe R., 4000 ft., March 17, 1907.

Bill blue-black, cere and gape yellow; feet yellow, claws black; iris brown.

90. LOPHOAËTUS OCCIPITALIS.

Lophoaëtus occipitalis (Daud.); Reich. loc. cit. vol. i. p. 582.

This bird occurs sparingly over a wide area. I never saw it otherwise than singly. It was specially common in the Lualaba Valley in April and May 1907.

91. *ASTURINULA MONOGRAMMICA.*

Asturinula monogrammica (Temm.); Neave, loc. cit. p. 24. No. 566. ♀. Edge of Chimpeti Plateau, Luwinda district, June 12, 1908.

Bill dusky, base and cere salmon-orange; feet red; iris deep reddish brown.

This is a common species. It seems to kill not a few snakes, as on more than one occasion when I have disturbed it, it has flown off with a snake in its talons.

92. *CIRCAËTUS CINERASCENS.*

Circaëtus cinerascens v. Müll.; Reich. loc. cit. p. 573. No. 289. ♀ ad. Bunkeya R., 3000 ft., July 26, 1907.

Bill black, base of both mandibles, gape, and cere yellow; feet yellow, claws black; iris very pale yellow.

93. *HELOTARSUS ECAUDATUS.*

Helotarsus ecaudatus (Daud.); Neave, loc. cit. p. 25.

The Bateleur is by far the commonest species of Eagle throughout the country.

94. *HALIAËTUS VOCIFER.*

Haliaëtus vocifer (Daud.); Reich. loc. cit. vol. i. p. 385. No. 537. ♀ ad. Chambezi R., May 17, 1908.

Bill blackish, base, cere, and orbit yellow; feet pale yellowish white; iris hazel-brown.

This handsome bird is common on most of the rivers throughout the country. It is fairly tame, and its cheerful screams are frequently to be heard throughout the day in these localities.

95. *GYPOHIERAX ANGOLENSIS.*

Gypohierax angolensis (Gmel.); Reich. loc. cit. vol. i. p. 603.

I observed this bird on two occasions, once in May 1907 on the Lualaba R., and again on the shores of L. Young in November 1908. I found it rather shy.

96. *MILVUS ÆGYPTIUS.*

Milvus ægyptius (Gm.); Neave, loc. cit. p. 25.

No. 307. ♂. Bunkeya R., 3000 ft., Aug. 3, 1907.

Bill and cere yellow; feet yellow, claws black; iris reddish brown.

These Kites are so common as to be a considerable nuisance in camp. They seem only to be present in the country from about the beginning of August to the end of March. When on the Upper Lufupa R., in September 1907, I saw many hundreds of these birds together, apparently on their southward spring migration.

97. *FALCO BIARMICUS*.

Falco biarmicus (Temm.); Neave, loc. cit. p. 26.

No. 501. ♀. Chambezi Valley, 4000 ft., April 17, 1908.

Bill—tip bluish dusky, base yellowish white; gape, cere, and orbit pale yellow; feet yellow, claws black; iris dark brown.

This bird is not very rare. It occurs singly or in pairs and has an extremely swift flight.

98. *FALCO SUBBUTEO*.

Falco subbuteo (L.); Neave, loc. cit. p. 26.

99. *CENCHRIS NAUMANNI*.

Cenchrus naumanni (Fleisch.); Reich. loc. cit. vol. i. p. 644.

No. 462. ♂ juv. Petauke, N.E. Rhodesia, 2400 ft., Jan. 11, 1908.

Bill dark bluish, tip dusky; gape and orbit yellow; feet yellow, claws whitish; iris dark brown.

100. *DISSODECTES DICKINSONI*.

Dissodectes dickinsoni (Scl.); Neave, loc. cit. p. 26.

Fam. STRIGIDÆ.

101. *ASIO NISUELLA*.

Asio nisuelia (Daud.); Reich. loc. cit. vol. i. p. 659.

Nos. 495, 496. ♂ ♀. Chambezi Valley, 4000 ft., April 15, 1908.

Bill dusky, tip of lower mandible whitish; feet dusky; iris dark hazel.

No. 502. ♂. Chambezi Valley, 4000 ft., April 17, 1908.

Bill dusky; feet dusky slate-coloured; iris dark brown.

Not uncommon on large swamps and in other suitable localities. This Owl appears to be partially diurnal in its habits.

102. *BUBO MACULOSUS*.

Bubo maculosus (Vieill.); Reich. loc. cit. vol. i. p. 654.

This is by no means an uncommon bird in the well-wooded districts.

103. *PISORHINA CAPENSIS*.

Pisorhina capensis (Smith); Reich. loc. cit. vol. i. p. 366.

No. 98. Dikulwe R., 4000 ft., March 19, 1907.

Bill dusky, paler at base; feet dirty greyish; iris sulphur-yellow.

No. 286. ♀. Bunkeya R., 3000 ft., July 26, 1907.

Bill dusky; feet dirty greyish; iris sulphur-yellow.

No. 467. ♂. Upper Luangwa Valley, 2000 ft., Feb. 21, 1907.

Bill greyish horn-coloured; feet greenish grey; iris sulphur-yellow.

This little Owl seems to be not uncommon, but easily overlooked. It appears to have a preference for rather thinly wooded hill-sides.

104. *SYRNIUM WOODFORDI*.

Syrnium woodfordi (Smith); Reich. loc. cit. vol. i. p. 668.

No. 766. ♀. E. of L. Bangweolo, Oct. 10, 1908.

Bill pale yellow; feet pale yellow, claws dusky; iris dusky.

This bird is not uncommon, but it is difficult to obtain specimens. It frequents patches of "msitu" and dense forest, usually on the banks of streams.

105. *STRIX FLAMMEA*.

Strix flammea (L.); Neave, loc. cit. p. 27.

Fam. PSITTACIDÆ.

106. PŒOCEPHALUS ANGOLENSIS.

Pæocephalus angolensis (Bocage); Neave, loc. cit. p. 27.

No. 3. ♂. Kapopo-Kansanshi, N.W. Rhodesia, 4000 ft., Jan. 16, 1907.

Bill whitish; feet grey; iris dark brown.

This bird is uncommon and very shy. It is usually best to attempt to intercept it on its way to the water, towards sunset.

107. PŒOCEPHALUS MEYERI SATURATUS.

Pæocephalus saturatus Sharpe, Bull. B. O. C. xi. p. 67 (1901).

No. 91. ♂. Dikulwe R., 4000 ft., March 16, 1907.

Bill dusky horn-coloured; feet grey; iris dark brown; skin round eye black.

No. 158. ♀. S. Kaluli R., Lualaba Valley, 2500 ft., April 27, 1908.

Bill dusky grey; feet dusky grey; iris dark red.

This is the common Parrot of the country and is ubiquitous.

108. AGAPORNIS LILIANÆ.

Agapornis lilianæ (Shelley); Neave, loc. cit. p. 28.

No. 479. ♂. Upper Luangwa R., 2000 ft., March 13, 1908.

Bill rose-coloured with paler base; feet pale greyish; iris reddish brown; orbit white.

This bird, so far as my experience goes, is confined to the Luangwa Valley. It is usually met with in flocks of considerable size during the dry season, but in the wet, breaks up into pairs and family-parties.

Fam. CORACIIDÆ.

109. CORACIAS CAUDATUS.

Coracias caudatus (L.); Neave, loc. cit. p. 29.

No. 290. ♂. Bunkeya R., 3000 ft., July 27, 1907.

Bill black; feet dirty yellow; iris dark brown.

This species is usually to be found only in the river-valleys on low ground. I did not meet with it in High Plateau country.

110. *CORACIAS SPATULATUS.*

Coracias spatulatus (Trim.); Neave, loc. cit. p. 29.

Nos. 72, 73. ♀, ♂ juv. Kambove, 4000 ft., March 1, 1907.

Bill black; feet greenish yellow; iris dark olive-brown.

No. 118. ♂ juv. Dikulwe R., 4000 ft., March 28, 1907.

Bill black; feet dull yellow; iris yellow-brown.

Nos. 160, 161. ♂ ♀. Lualaba R., 2500 ft., May 2, 1907.

Bill black; feet greenish yellow; iris yellow-brown.

This is a common bird on the High Plateau, less so on the low ground. During the latter half of the rains it is usually in family-parties, comprising three or four young birds besides the parents.

111. *CORACIAS OLIVACEICEPS.*

Coracias olivaceiceps (Sharpe); Neave, loc. cit. p. 30.

No. 605. ♂. Chirui Island, L. Bangweolo, July 8, 1908.

Bill black; feet greenish yellow; iris dark brown.

This appears to be a very rare bird west of the Mchinga Escarpment. It is usually solitary.

112. *EURYSTOMUS AFER.*

Eurystomus afer (Lath.); Neave, loc. cit. p. 30.

No. 26. ♀. Kambove, 4500 ft., Feb. 12, 1907.

Bill yellow; feet pale greenish brown; iris brown.

This bird seems to be migratory. It appears to be present only from about September to March, when it is not uncommon.

Family *ALCEDINIDÆ.*113. *CERYLE RUDIS.*

Ceryle rudis (L.); Neave, loc. cit. p. 31.

No. 606. ♂. L. Bangweolo, July 9, 1908.

Bill and feet black; iris dark brown.

No. 768. ♀. E. of L. Bangweolo, Oct. 12, 1908.

Bill and feet black; iris brown.

This bird occurs everywhere commonly in suitable localities.

114. CERYLE MAXIMA.

Ceryle maxima (Pall.); Reich. loc. cit. vol. ii. p. 298.

This bird is not uncommon on the rivers in both the Zambezi and Congo basins. It is very shy.

115. CORYTHORNIS CYANOSTIGMA.

Corythornis cyanostigma (Rüpp.); Neave, loc. cit. p. 31.

No. 598. ♀. L. Bangweolo, July 5, 1908.

Bill and feet coral-scarlet; iris brown.

No. 712. ♀. Kalungwisi R., Sept. 9, 1908.

Bill and feet scarlet; iris dark brown.

No. 779. ♂ juv. E. of L. Bangweolo, Oct. 17, 1908.

Bill black; feet—upper surface brownish, lower orange-red.

A common species, especially abundant on L. Bangweolo.

116. ISPIDINA NATALENSIS.

Ispidina natalensis (Smith); Reich. loc. cit. vol. ii. p. 287.

No. 798. ♀. Lulingila R., E. Bangweolo, Oct. 26, 1908.

Bill orange-scarlet; feet coral-red; iris dark brown.

This appears to be a rare bird—in fact, this was the only specimen met with.

117. HALCYON SWAINSONI.

Halcyon swainsoni (Smith); Neave, loc. cit. p. 31.

No. 739. ♀. Machinga Plateau, Kalungwisi district, 4200 ft., Sept. 19, 1908.

Bill and feet scarlet; iris dark brown.

Though widely distributed, I found this little bird nowhere common. The above-mentioned example was nesting in a deep hole in a bank at the foot of a termite mound.

118. HALCYON CHELICUTI.

Halcyon chelicutensis (Bocage); Neave, loc. cit. p. 32.

Halcyon chelicuti Reich. loc. cit. vol. ii. p. 271.

No. 19. ♀. Kambove, 4500 ft., Feb. 11, 1907.

Bill—upper mandible dusky, lower scarlet; feet and legs, anterior surface reddish dusky, posterior orange-red; iris dark brown.

This seems to be certainly the commonest of the Bush-Kingfishers in this part of Africa. It is most abundant in the Luangwa Valley.

119. HALCYON ALBIVENTRIS ORIENTALIS.

Halcyon orientalis (Peters); Neave, loc. cit. p. 32.

No. 276. ♀. Kambove, 4600 ft., July 10, 1907.

Bill dark red, tipped with dusky; feet red, toes darker; iris dark brown.

Family BUCEROTIDÆ.

120. BUCORAX CAFFER.

Bucorax caffer (Bocage); Neave, loc. cit. p. 33.

These birds are common everywhere, and their deep booming note, not unlike the distant grunt of a lion, may be frequently heard, especially in the early mornings.

121. LOPHOCEROS ERYTHORHYNCHUS.

Lophoceros erythrorhynchus (Temm.); Neave, loc. cit. p. 35.

No. 477. ♀. Upper Luangwa Valley, 2000 ft., March 8, 1908.

Bill dull reddish, base whitish; feet black; iris ochre-yellow.

This bird, so far as my experience goes, is strictly confined to "Mopane" bush in the low ground of the Zambezi basin. It has a characteristic note, whence its native name "Kopi kopi," this sound being repeated with extreme rapidity.

122. LOPHOCEROS MELANOLEUCUS.

Lophoceros melanoleucus (Licht.); Neave, loc. cit. p. 34.

No. 102. ♂. Dikulwe R., 4000 ft., March 21, 1907.

Bill dark red, yellowish at basal edge; feet black; iris ochre-yellow.

No. 165. ♂. Lualaba R., 2500 ft., May 2, 1907.

Bill reddish; feet black; iris orange-yellow.

This bird is widely distributed, but is shy and it is rather difficult to obtain specimens.

123. LOPHOCEROS EPIRHINUS.

Lophoceros epirhinus (Sundev.); Neave, loc. cit. p. 34.

No. 326. ♀. Bunkeya R., 3500 ft., Aug. 18, 1907.

Upper mandible dark reddish at tip, casque creamy white, dusky in middle line; lower mandible dusky, reddish toward

the tip, with three diagonal white lines at base; feet black; iris reddish brown.

124. *LOPHOCEROS PALLIDIROSTRIS.*

Lophoceros pallidirostris (Finsch & Hartl.); Reich. loc. cit. vol. ii. p. 254.

No. 252. ♀. Katanga's, Lufira R., 3700 ft., June 25, 1907.

Bill whitish horn-coloured, darker tip; feet dusky; iris brown.

No. 765. ♂. E. of L. Bangweolo, Oct. 10, 1908.

Bill whitish horn-coloured, the tip darker; feet black; iris dark brown.

125. *LOPHOCEROS NEUMANNI.*

Lophoceros neumanni (Reich.); Neave, loc. cit. p. 34.

126. *BYCANISTES BUCCINATOR.*

Bycanistes buccinator (Temm.); Neave, loc. cit. p. 35.

This bird is almost invariably to be found in dense forest in the neighbourhood of water. It is probably attracted by the number of fruit-trees in these spots.

Fam. UPUPIDÆ.

127. *UPUPA AFRICANA.*

Upupa africana (Bechst.); Neave, loc. cit. p. 36.

No. 250. ♀. Upper Lufira R., 3500 ft., June 24, 1907.

Bill dark brown, with paler base; feet grey; iris dark brown.

This is rather a shy bird, generally most in evidence in June and July, when the undergrowth in the woodland has just been burned.

128. *IRRISOR ERYTHORHYNCHUS.*

Irrisor erythrorhynchus (Lath.); Neave, loc. cit. p. 36.

No. 113. ♂. Dikulwe R., 4000 ft., March 24, 1907.

Bill coral-red, tipped with greyish; feet coral-red; iris dark brown.

This bird is usually found in small parties. It has a loud chattering note, which is very emphatic when it is alarmed. On these occasions, before taking to flight, it commonly goes throughout a curious see-sawing motion on the bough, moving its whole body and tail in unison.

129. RHINOPOMASTUS CYANOMELAS SCHALOWI.

Rhinopomastus schalowi (Neum.); Neave, loc. cit. p. 37.

No. 100. ♂. Dikulwe R., 4000 ft., March 20, 1907.

Bill and feet black; iris dark brown.

This bird is usually found singly, though occasionally in parties. It very often forms one of the members of a bird-party.

Fam. MEROPIDÆ.

130. DICROCERCUS HIRUNDINEUS.

Dicrocercus hirundineus (Licht.); Neave, loc. cit. p. 37.

No. 172. ♂. Lualaba R., 2500 ft., May 5, 1907.

Bill black; feet dusky brownish; iris crimson.

No. 421. ♀. Lupupa R., 4000 ft., Oct. 30, 1907.

Bill black; feet dusky; iris blood-red.

No. 790. ♂. Lower Chambezi R., Oct. 24, 1908.

Bill black; feet dusky; iris red.

This bird is a woodland species. It is usually solitary, but I have sometimes seen a family-party of as many as five individuals in the wet season.

131. MELITTOPHAGUS MERIDIONALIS.

Melittophagus meridionalis (Sharpe); Neave, loc. cit. p. 37.

No. 265. ♀. Kambove, 4500 ft., July 2, 1907.

Bill black; feet dusky; iris blood-red.

No. 570. ♀. Luena, N.E. of L. Bangweolo, 4000 ft., June 17, 1908.

Bill black; feet dusky; iris red.

Usually a common species, especially in the more open country. It is less abundant in the Congo Basin, especially in Katanga.

132. MELITTOPHAGUS ALBIFRONS.

Melittophagus albifrons (Cab.); Neave, loc. cit. p. 38.

No. 214. ♀. Upper Lualaba R., 3600 ft., May 28, 1907.

Bill black; feet dusky; iris dark brown.

No. 228. ♀. Upper Lufira R., 3500 ft., June 12, 1907.

Bill black; feet dusky; iris dark brown.

This bird is a river-haunting species and is usually met with in colonies.

133. MEROPS APIASTER.

Merops apiaster (L.); Neave, loc. cit. p. 38.

This bird is very noticeable and occurs in considerable numbers every year in September and October when on its journey farther south.

134. MEROPS NATALENSIS.

Merops natalensis (Reich.); Neave, loc. cit. p. 39.

This gorgeous species is common in large colonies on the Luangwa R. and on the lower ground on the Lualaba R., but I never saw it elsewhere.

135. AEROPS BOEHMI.

Aerops boehmi Reich. loc. cit. vol. ii. p. 319.

No. 647. ♀. Lofu R., L. Tanganyika, 4000 ft., Aug. 8, 1908.

Bill black; feet dusky; iris crimson.

Nos. 666, 667, 668. ♀ ♂ ♂. Lower Lofu R., 3500 ft Aug. 15, 1908.

Bill black; feet dusky; iris crimson.

I only met with this rare Bee-eater in the Lofu Valley, south of Lake Tanganyika. It has the habits of a *Melittophagus* rather than of a *Merops*, making short flights and constantly returning to the same perch. It haunts the edges of dense forests. I never saw it hawking high in the air as do *M. apiaster* and *M. natalensis*. It is not at all shy.

Fam. CAPRIMULGIDÆ.

136. COSMETORNIS VEXILLARIUS.

Cosmetornis vexillarius (Gould); Neave, loc. cit. p. 39.

No. 410. ♂. Lufupa R., 4000 ft., Oct. 25, 1907.

Bill pinkish horn-coloured, tipped with dusky; feet pale brownish; iris dark brown.

No. 424. ♂. Lufupa R., 4000 ft., Oct. 30, 1907.

Bill brownish, tipped with dusky; feet pinkish grey, toes darker; iris dark brown.

No. 702. ♂, breeding. Kalungwisi R., Sept. 8, 1908.

Bill brownish horn-coloured; feet dark brown; iris dark brown.

137. *CAPRIMULGUS FOSSIL*.

Caprimulgus fossei Hartl. ; Reich. loc. cit. vol. ii. p. 365.

No. 273. ♂ . Near Kambove, 4000 ft., July 6, 1907.

Bill greyish, tip dusky ; feet brown ; iris dark brown.

No. 287. ♂ . Bunkeya R., 3500 ft., July 26, 1907.

Bill dusky brown, gape paler ; feet dark brown ; iris dark brown.

No. 528. ♂ . Chambezi R., 4000 ft., May 8, 1908.

Bill, feet, and iris brown.

No. 530. ♀ . Chambezi R., May 10, 1908.

Bill brownish ; feet pale brownish grey ; iris brown.

138. *CAPRIMULGUS FRÆNATUS*.

Caprimulgus frænatus (Salv.) ; Neave, loc. cit. p. 40.

139. *CAPRIMULGUS FERVIDUS*.

Caprimulgus fervidus Sharpe ; Reich. loc. cit. vol. ii. p. 353.

No. 313. ♂ . Bunkeya R., 3500 ft., Aug. 8, 1907.

Bill dark brown, somewhat paler below ; feet dark brownish, tinted with pink ; iris dark brown.

Fam. COLIIDÆ.

140. *COLIUS LEUCOTIS AFFINIS*.

Colius affinis Shelley ; Neave, loc. cit. p. 40.

Nos. 309, 310. ♂ ♀ . Bunkeya R., 3500 ft., Aug. 6, 7, 1907.

Bill black, with a white median patch above and below in middle line ; feet red, claws black ; iris—upper third greenish yellow, lower two-thirds brown ; bare skin round eye dark grey or (310) dusky.

No. 385. ♀ . Lufupa R., 4000 ft., Oct. 3, 1907.

Bill black, with a white median patch ; lower mandible—black base, white tip ; feet coral-pink ; iris—upper half yellow, lower brown.

This is not an uncommon bird. It is generally seen in flocks, and inhabits the bush on the banks of streams.

Fam. TROGONIDÆ.

141. HAPALODERMA NARINA.

Hapaloderma narina (Steph.) ; Sharpe, Hand-l. Birds, vol. ii. p. 150.

Apaloderma narina Reich. loc. cit. vol. ii. p. 212.

No. 338. ♀. Bunkeya R., 3500 ft., Aug. 30, 1907.

Bill greyish horn-coloured, gape yellowish ; feet greyish brown ; iris brown.

This species is not uncommon in well-wooded localities on the low ground in the Congo Basin. I never met with it on the High Plateau country or in the Luangwa Valley. It is called "Kasuku" by the natives on the Lualaba River. It is a shy and silent bird, with a remarkably noiseless flight. However frequently disturbed, it never seems to fly more than about thirty yards at a time.

Fam. MUSOPHAGIDÆ.

142. TURACUS LIVINGSTONII MARUNGENSIS.

Turacus livingstonii marungensis Reich. loc. cit. vol. ii. p. 52.

Turacus livingstonii Neave, loc. cit. p. 41.

No. 685. ♂. Upper Lofu Valley, near L. Tanganyika, Aug. 26, 1908.

Bill dull red ; feet black ; iris brown ; orbit scarlet.

This was the only specimen of this form of Touraco that I met with in the High Plateau.

143. GALLIREX CHLOROCHLAMYS.

Gallirex chlorochlamys (Shelley) ; Neave, loc. cit. p. 42.

I did not meet with this bird outside of the basin of the Luangwa Valley.

144. MUSOPHAGA ROSSÆ.

Musophaga rossæ Gould ; Neave, loc. cit. p. 42.

No. 278. ♂. Kambove, 4500 ft., July 10, 1907.

Bill—upper mandible and bare skin on face bright yellow, with a median patch of orange, lower mandible reddish ; feet black ; iris dark brown.

No. 468. ♂. Between Lubudi and Lufupa Rivers, 4000 ft., Oct. 23, 1907.

Bill and skin on face bright yellow, base of lower mandible reddish : base of shield in the middle line orange.

This is a common bird west of the Mchinga Escarpment and throughout the Congo basin. It does not occur in the Luangwa Valley.

145. SCHIZORHIS CONCOLOR.

Schizorhis concolor (Smith) ; Neave, loc. cit. p. 43.

This species occurs over a wide area, but is local, being usually found only in low-lying river-valleys.

Fam. CUCULIDÆ.

146. COCCYSTES GLANDARIUS.

Coccytes glandarius (L.) ; Neave, loc. cit. p. 43.

147. COCCYSTES JACOBINUS.

Coccytes jacobinus (Bodd.) ; Neave, loc. cit. p. 44.

148. COCCYSTES CAFER.

Coccytes cafer (Licht.) ; Neave, loc. cit. p. 44.

These birds are to be met with every year about November and December on their southward migration. *C. jacobinus* is much the commonest of the three species, and some of them seem to remain in these latitudes throughout the summer.

149. PACHYCOCCYX VALIDUS.

Pachycoccyx validus Reich. loc. cit. vol. ii. p. 83.

No. 365. ♀. Mpandi R., Dikulwe Valley, 3600 ft., Sept. 22, 1907.

Bill dusky, base and gape yellow ; feet yellow ; iris brown, orbit yellow.

The only specimen observed of this rare bird.

150. CUCULUS CANORUS.

Cuculus canorus (L.) ; Neave, loc. cit. p. 45.

No. 213. ♂. Upper Lualaba R., 3600 ft., May 27, 1907.

Bill orange-yellow, anterior half of upper and tip of lower mandible black ; feet yellow ; iris brown ; orbit sulphur-yellow.

151. CUCULUS SOLITARIUS.

Cuculus solitarius (Stephens) ; Neave, loc. cit. p. 45.

This Cuckoo appears pretty common during the summer months.

152. CUCULUS CLAMOSUS.

Cuculus clamosus (Lath.) ; Neave, loc. cit. p. 44.

The striking three-syllabled note of this species begins to be heard everywhere about September and October, but the bird itself is not very often seen.

153. METALLOCOCCYX SMARAGDINEUS.

Metallococcyx smaragdineus (Swains.) ; Neave, loc. cit. p. 45.

154. CHRYSOCOCCYX CUPREUS.

Chrysococcyx cupreus (Bodd.) ; Neave, loc. cit. p. 46.

This is a by no means uncommon bird in the winter months. It is rather shy.

155. CENTROPUS NIGRORUFUS.

Centropus nigrorufus (Cuvier) ; Reich. loc. cit. vol. ii. p. 71.

No. 507. ♂. Chambezi Valley, 4000 ft., April 18, 1908.

Bill and feet black ; iris purplish brown.

I found this a very rare bird—in fact, I only met with it on one occasion, where I found a few individuals on the borders of the large Nashinga swamp in the mid-Chambezi Valley.

156. CENTROPUS BURCHELLI.

Centropus burchelli (Swains.) ; Neave, loc. cit. p. 46.

I never met with this species outside the Luangwa Valley.

157. CENTROPUS SUPERCILIOSUS.

Centropus superciliosus (Hempr. & Ehrenb.) ; Neave, loc. cit. p. 47.

No. 297. ♂. Bunkeya R., 3000 ft., July 31, 1907.

Bill black ; feet slate-coloured ; iris blood-red.

No. 302. ♀. Bunkeya R., July 31, 1907.

Bill black, lower mandible bluish horn-coloured ; feet slate ; iris red.

No. 362. ♀. Bunkeya R., Sept. 10, 1907.

Bill black; feet dark slate-coloured; iris blood-red.

No. 671. ♀. Lofu R., L. Tanganyika, Aug. 16, 1908.

Bill black, base of lower mandible blue-grey; feet slate-coloured.

No. 585. ♀. Chishi Island, L. Bangweolo, June 24, 1908.

Bill black; feet dark slate-coloured; iris red.

This bird is common everywhere in suitable localities.

FAM. INDICATORIDÆ.

158. INDICATOR INDICATOR.

Indicator indicator (Gm.); Neave, loc. cit. p. 47.

No. 126. ♀. Dikulwe R., 4000 ft., March 31, 1907.

Bill dusky brown, tip paler; feet dusky brown; iris yellow-brown.

No. 170. ♂. Lualaba R., 2500 ft., May 5, 1907.

Bill pinkish, deeper in colour at base, tip of upper mandible slightly dusky; feet dark grey; iris brown.

No. 764. ♂. E. of L. Bangweolo, Oct. 10, 1908.

Bill pinkish flesh-coloured, gape and nostrils purplish; feet dusky; iris brown.

This is a very common bird, so much so that it becomes sometimes a positive nuisance. On several occasions when following elephant or important game I have had to detail natives to follow it in order to put an end to its noisy importunities.

159. INDICATOR MAJOR.

Indicator major Steph.; Reich, loc. cit. vol. ii. p. 106.

No. 521. ♀. Chambezi R., 4000 ft., May 5, 1908.

Bill dusky brown; feet dark slate-coloured; iris olive-brown; skin round eye dark slate-coloured.

No. 522. ♂. Chambezi R., May 5, 1908.

Bill very dark brown; feet blackish; iris olive-brown; skin round eye dark slate-coloured.

This would appear to be a rare bird in this part of Africa, as I only met with one pair, which were shot in some dense

forest. I cannot agree with Capt. Boyd Alexander's opinion* that this species is an immature stage of *I. indicator*.

160. *INDICATOR VARIEGATUS*.

Indicator variegatus (Less.); Neave, loc. cit. p. 48.

161. *PRODOTISCUS REGULUS*.

Prodotiscus regulus Sundevis; Reich, loc. cit. vol. ii. p. 114. No. 646. ♂. Lofu R., near L. Tanganyika, Aug. 7, 1908. Bill and feet dusky; iris brown.

This was the only specimen of this rare bird that I met with. It did not appear to have the habits of its Honey-Guide cousins.

Fam. CAPITONIDÆ.

162. *LYBIUS MACCLOUNI*.

Lybius macclouni (Shelley); Neave, loc. cit. p. 48.

No. 52. ♀. Kambove, 4500 ft., Feb. 22, 1907.

Bill whitish; feet dirty flesh-coloured; iris cinnamon-brown.

No. 103. ♀. Dikulwe R., 4000 ft., March 21, 1907.

Bill whitish; feet purplish pink; iris blood-red.

No. 580. ♀. N. shore of L. Bangweolo, Jan. 22, 1908.

Bill white; feet pinkish brown; iris orange-red.

No. 689. ♀. Lofu Valley, L. Tanganyika, Aug. 26, 1908.

Bill whitish; feet flesh-pink; iris cinnamon-red.

This bird is common everywhere, except that it is apparently absent from the Luangwa Valley. It usually occurs in pairs and is nearly always found in the bush on the banks of streams. It is very tame and rather inquisitive.

163. *LYBIUS TORQUATUS*.

Lybius torquatus (Dumont); Neave, loc. cit. p. 48.

164. *LYBIUS TORQUATUS CONGICUS*.

Lybius torquatus congicus Reich, loc. cit. vol. ii. p. 126.

No. 109. ♂. Dikulwe R., 3500 ft., March 23, 1907.

Bill black; feet dusky; iris very dark brown.

* Bull. B. O. C. xxi. p. 91 (1908).

No. 120. ♂. Dikulwe R., 3500 ft., March 29, 1907.

Bill black; feet dusky; iris red-brown.

Birds from this side of the watershed appear to belong to this race, as compared with typical *L. torquatus* in the Luangwa Valley.

165. *BARBATULA EXTONI*.

Barbatula extoni Layard; Reich. loc. cit. vol. ii. p. 150.

No. 143. ♂. S. Kaluli R., Lualaba Valley, 3000 ft., April 18, 1907.

Bill black; feet dusky brown; iris reddish brown.

No. 272. ♀. Kambove, 4500 ft., July 4, 1907.

Bill black; feet dusky brown; iris dark brown.

No. 443. ♂. Near Serenje, N.E. Rhodesia, 4500 ft., Dec. 17, 1907.

Bill and feet black; iris dark brown.

No. 523. ♂. Chambezi R., 3500 ft., May 6, 1908.

Bill black; feet dusky; iris dark brown.

No. 785. ♀. E. of L. Bangweolo, Oct. 20, 1908.

Bill black; feet dusky; iris dark brown.

No. 803. ♂. Valley of Mansya R., Mpika Plateau, Oct. 29, 1908.

Bill and feet dusky; iris brown.

This little bird is not uncommon in wooded country. It sometimes occurs in family-parties of about five individuals, though usually singly. A single bird is sometimes seen amongst a "bird-party."

166. *STACTOLEMA ANCHIETÆ*.

Stactolema anchietæ (Boc.); Sharpe, Hand-l. Birds, vol. ii. p. 182.

Buccanodon anchietæ Reich. loc. cit. vol. ii. p. 141.

No. 147. ♂. S. Kaluli R., Lualaba R., April 20, 1907.

Bill and feet black; iris dusky.

No. 221. ♂. Upper Lualaba R., May 30, 1907.

Bill and feet black; iris dark brown.

I observed this bird only in the Lualaba Valley.

167. TRACHYPHONUS CAFER.

Trachyphonus cafer (Vieill.); Neave, loc. cit. p. 49.

No. 9. ♂. Kambove, 4500 ft., Feb. 5, 1907.

Bill pale greenish yellow, tip dusky; feet dusky; iris reddish brown.

A fairly common bird, which is more often heard than seen.

Fam. PICIDÆ.

168. DENDROMUS FUELLEBORNI.

Dendromus fülleborni (Neum.); Neave, loc. cit. p. 49.

No. 234. ♂. Upper Lufira R., 3600 ft., June 14, 1907.

Bill dusky, lower mandible slightly paler; feet greenish grey; iris dark brown.

169. DENDROMUS SMITHI.

Dendromus smithi (Mahl.); Reich. loc. cit. vol. ii. p. 176.

No. 536. ♂. Chambezi R., May 16, 1908.

Bill blackish; feet dull greenish; iris pale amethyst-pink.

No. 748. ♂. Edge of Chimpili Plateau, N. of L. Bangweolo, Sept. 24, 1908.

Bill dull slate-coloured, somewhat paler below; feet greenish grey; iris pale claret.

170. DENDROMUS BENNETTI.

Dendromus bennetti (Smith); Neave, loc. cit. p. 50.

Nos. 27, 28. ♀ ♀. Kambove, 4500 ft., Feb. 13, 1907.

Bill greenish dusky; feet greenish grey; iris brownish magenta.

No. 53. ♀. Kambove, 4500 ft., Feb. 23, 1907.

Bill greyish; feet greenish grey; iris red.

No. 114. ♂. Dikulwe R., 4000 ft., March 24, 1907.

Bill dusky horn-coloured; feet greenish grey; iris amethyst-pink.

171. DENDROPICUS HARTLAUBI.

Dendropicus hartlaubi (Malh.); Neave, loc. cit. p. 50.

No. 116. ♂. Dikulwe R., 3500 ft., March 26, 1907.

Bill dusky horn-coloured; feet greenish grey; iris dark red.

No. 253. ♀. Upper Lufira R., 3600 ft., June 25, 1907.

Bill dark grey; feet olive-grey; iris dark red.

No. 456. Juv. Near Serenje, N.E. Rhodesia, Dec. 20, 1907.

Bill dusky grey; feet greenish; iris reddish brown.

No. 490. ♂. Upper Luangwa R., 3000 ft., March 29, 1908.

Bill dark grey; feet greenish grey; iris dull red.

No. 642. ♀. Lofu R., Tanganyika Plateau, 4000 ft.,
Aug. 6, 1908.

Bill dark grey; feet greenish; iris dull red.

No. 762. ♂. E. of L. Bangweolo, Oct. 9, 1908.

Bill dusky; feet greenish grey; iris dull red.

172. THRIPIAS NAMAQUUS.

Thripis namaquus (Licht.); Neave, loc. cit. p. 50.

173. MESOPICUS RUWENZORI.

Mesopicus ruwenzori Sharpe, Bull. B. O. C. xiii. p. 8 (1902).

No. 280. ♀. Kambove, 4500 ft., July 11, 1907.

Bill dusky, base of lower mandible blue-grey; feet dark grey; iris dark brown.

No. 348. ♀. Bunkeya R., 3500 ft., Aug. 31, 1907.

Bill dusky, base of lower mandible blue-grey; feet greenish grey; iris brown.

This bird, so far as my experience goes, differs from other Woodpeckers in its preference for patches of dense forest. It is rather shy.

Fam. HIRUNDINIDÆ.

174. CHELIDON URBICA.

Chelidonaria urbica (L.); Neave, loc. cit. p. 51.

I again saw a very large number of these birds, apparently on migration, on the Upper Lufira River, on November 24, 1907. This date is therefore thirteen days later and the locality some three hundred miles north-west of the observation made on the first expedition (*loc. cit.* p. 51).

175. HIRUNDO RUSTICA.

Hirundo rustica L.; Reich. loc. cit. vol. ii. p. 406.

No. 150. Mazanguli, Lualaba Valley, 2600 ft., April 24, 1907.

Bill and feet black; iris dusky.

No. 409. ♂. Between Lubudi and Lufupa Rivers, Oct. 23, 1907.

Bill black, gape yellow; feet dusky brown; iris dark brown.

The European Swallow seems to be uncommon, and both these individuals, I am inclined to think, were on migration.

176. *HIRUNDO DIMIDIATA.*

Hirundo dimidiata Sund. : Reich. loc. cit. vol. ii. p. 403.

No. 10. Juv. Kambove, 4500 ft., Feb. 6, 1907.

Bill and feet black; iris dark brown.

Judging by the season and the fact that this is a young bird, this species, which is uncommon in my experience, appears to breed here.

177. *HIRUNDO GRISEOPYGA.*

Hirundo griseopyga Sundev. ; Neave, loc. cit. p. 51.

No. 510. ♂. Chambezi Valley, 4000 ft., April 23, 1908.

Bill and feet black; iris dusky brown.

No. 813. ♀? Mansya R., L. Young, Nov. 2, 1908.

Bill and feet dusky; iris brown.

This Swallow is usually seen hawking after insects in open parts of the country.

178. *HIRUNDO PUELLA.*

Hirundo puella Temm. & Schl. ; Neave, loc. cit. p. 52.

No. 179. Busanga, Lualaba R., 2800 ft., May 10, 1907.

Bill and feet black; iris dark brown.

No. 359. Bunkeya R., 3000 ft., Aug. 7, 1907.]

Bill black; feet dusky; iris dark brown.

No. 699. Kalungwisi R., Sept. 7, 1908.

Bill and feet black; iris brown.

This species is nearly always found on the banks of streams. I did not meet with it far from water.

179. *HIRUNDO MONTEIRI.*

Hirundo monteiri Hart. ; Neave, loc. cit. p. 52.

No. 34. ♂. Kambove, 4500 ft., Feb. 15, 1907.

Bill and feet black; iris very dark brown.

No. 361. ♂. Bunkeya R., 3000 ft., Sept. 8, 1907.

Bill black; feet dusky; iris dark brown.

No. 581. ♂. N. shore of L. Bangweolo, June 22, 1908.

Bill and feet black; iris dark brown.

180. *CLIVICOLA CINCTA*.

Clivicola cincta (Bodd.); Sharpe, Hand-l. Birds, vol. iii. p. 189.

Riparia cincta Reich. loc. cit. vol. ii. p. 394.

No. 7. ♂. Kansanshi, N.W. Rhodesia, 4600 ft., Jan. 28, 1907.

Bill and feet black; iris dark brown.

Fam. MUSCICAPIDÆ.

181. *ALSEONAX SUBADUSTA*.

Alseonax subadusta Shelley; Neave, loc. cit. p. 52.

No. 180. ♀. Busanga, Lualaba R., 2800 ft., May 10, 1907.

Bill dark brown; feet dusky-brown; iris dark brown.

No. 251. ♀. Katanga's, Lufira R., 3700 ft., June 24, 1907.

Bill brown, base of lower mandible yellow; feet dusky; iris brown.

No. 279. ♀. Kambove, 4500 ft., July 10, 1907.

Bill dusky, lower mandible yellowish tipped with dusky; feet dusky; iris dark brown.

No. 567. ♀. Edge of Chimpili Plateau, N. of L. Bangweolo, June 13, 1908.

Bill dusky, base of lower mandible and gape yellowish; feet dark brown; iris brown.

No. 698. ♀. Kalungwisi Valley, Sept. 5, 1908.

Bill dusky, base of lower mandible yellowish; feet dusky; iris dark brown.

This little bird is not uncommon in the woodland, but is often overlooked on account of its small size and inconspicuous appearance. It is sometimes one of the members of a "bird party."

182. *ALSEONAX INFULATA*.

Alseonax infulata (Hart.); Reich. loc. cit. vol. ii. p. 457.

No. 597. ♀. Lake Bangweolo, July 5, 1908.

Bill and feet black; iris brown.

This was one of a pair of birds seen among the reeds in a lagoon forming part of L. Bangweolo and quite a mile from dry land. It was not observed elsewhere.

183. *ALSEONAX MELANOPTERA*.

Alseonax melanoptera Jackson, Bull. B. O. C. xvi. p. 88 (1906).

No. 725. Kalungwisi R., Sept. 15, 1908.

Bill black; feet dark brown; iris dark brown.

It seems doubtful whether this bird is really distinct from *A. lugens* (Hartl.).

184. *MELÆNORNIS ATER*.

Melenornis ater (Sund.); Neave, loc. cit. p. 53.

No. 101. ♂. Dikulwe R., 4000 ft., March 20, 1907.

Bill and feet black; iris brown.

This bird is not uncommon in woodland country. It has a habit of sitting at the top of a tall tree.

185. *BRADYORNIS MURINUS*.

Bradyornis murinus Finsch & Hartl.; Neave, loc. cit. p. 53.

No. 157. ♂. Kaluli R., Lualaba Valley, 2500 ft., April 27, 1907.

Bill and feet dusky brown; iris dark brown.

No. 590. ♂. West coast of Lake Bangweolo, July 1, 1908.

Bill dusky; feet dark brown; iris brown.

This bird is rather wary for a Flycatcher. It frequents the bushes in open spaces and clearings, such as native gardens.

186. *BRADYORNIS GRISEUS*.

Bradyornis griseus Reich. J. f. O. 1882, p. 211.

Bradornis griseus Reich. loc. cit. vol. ii. p. 438.

No. 527. ♀. Chambezi R., 4000 ft., May 7, 1908.

Bill dark brown; feet black; iris dark brown.

No. 723. ♂. Kalungwisi R., Sept. 14, 1908.

Bill and feet black ; iris brown.

This bird, which is distinguished from *B. murinus* by its smaller size, frequents somewhat denser bush and is not uncommon.

187. *MUSCICAPA GRISOLA*.

Muscicapa grisola L. ; Neave, loc. cit. p. 53.

No. 48. ♂. Kambove, 4500 ft., Feb. 22, 1907.

Bill horn-brown ; feet dusky ; iris dark brown.

No. 486. ♀. Upper Luangwa Valley, 3000 ft., March 28, 1908.

Bill dusky horn-coloured, base of lower mandible paler ; feet dusky ; iris dark brown.

188. *MUSCICAPA CÆRULESCENS*.

Muscicapa cærulescens (Hartl.) ; Neave, loc. cit. p. 54.

No. 107. ♀. Dikulwe, 4000 ft., March 23, 1907.

Bill black, lower mandible blue-grey tipped with dusky ; feet dusky ; iris brown.

No. 162. ♂. Lualaba R., 2500 ft., May 2, 1907.

Bill dusky, blue-grey below ; feet dusky ; iris dark brown.

No. 283. ♀. Lukafu, 3000 ft., July 22, 1907.

Bill black, blue-grey below ; feet dusky grey ; iris dark brown.

No. 342. Bunkeya R., 3000 ft., Aug. 31, 1907.

Bill dusky, lower mandible blue-grey tipped dusky ; feet dusky brown ; iris brown.

No. 426. ♂. Lufupa R., 4000 ft., Oct. 31, 1907.

Bill dusky, lower mandible bluish grey ; feet olive-brown ; iris dark brown.

No. 632. ♂. Upper Kalungwisi Valley, July 29, 1908.

Bill dusky, lower mandible bluish grey ; feet black ; iris brown.

No. 665. ♀. Lofu R., L. Tanganyika, Aug. 14, 1908.

Bill dusky, base of lower mandible greyish ; feet very dark brown ; iris brown.

A common species, especially in thick bush or forest on the banks of streams.

189. *HYLIOTA AUSTRALIS.*

Hyliota australis Shelley; Reich. loc. cit. vol. ii. p. 474.

No. 17. ♂? Kambove, 4500 ft., Feb. 10, 1907.

Bill black, bluish grey at base of lower mandible; feet blackish; iris dark brown.

No. 20. ♀. Kambove, Feb. 11, 1907.

Bill dusky, bluish horn-coloured below; feet bluish dusky; iris dark brown.

No. 65. Juv. Kambove, Feb. 28, 1907.

Bill black, blue-grey below; feet black; iris dark brown.

No. 138. ♂. Dikulwe R., 4000 ft., April 3, 1907.

Bill black, blue-grey below; feet dusky grey; iris dark brown.

No. 551. ♂. Upper Luansenshi R., N.E. of L. Bangweolo, June 4, 1908.

Bill black above, bluish grey below; feet black; iris brown.

No. 562. ♀ juv. Edge of Chimpili Plateau, June 10, 1908.

Bill dusky, base of lower mandible blue-grey; feet dusky; iris brown.

This little bird is not uncommon in the woodland country west of the Melinga Escarpment. It is usually solitary, but is occasionally seen in family-parties of five or six individuals.

190. *PARISOMA PLUMBEUM.*

Parisoma plumbeum (Hartl.); Reich. loc. cit. vol. iii. p. 521.

No. 222. ♂. Upper Lualaba R., 3800 ft., May 30, 1907.

Bill black, base of lower mandible grey; feet dusky grey; iris red.

191. *MYOPORNIS BOEHMI.*

Myopornis boehmi (Reich.); Reich. loc. cit. vol. ii. p. 448.

No. 538. ♂. Chambezi R., May 20, 1908.

Bill blackish; feet dark bluish grey; iris dark brown.

The only specimen of this rare bird obtained was shot in the bush on the banks of the Chambezi and appeared to have much the same habits as a *Muscicapa*.

192. *CHLOROPETA NATALENSIS.*

Chloropeta natalensis A. Smith; Reich. loc. cit. vol. ii. p. 464.

No. 39. ♀. Kambove, 4500 ft., Feb. 17, 1907.

Bill dusky horn-coloured above, pinkish horn-coloured below; feet dusky; iris olive-brown.

No. 50. ♀, breeding. Kambove, 4500 ft., Feb. 22, 1907.

Bill dusky horn-coloured, whitish below; feet dusky greyish; iris dark brown.

No. 69. ♂. Kambove, March 1, 1907.

Bill horn-brown, pinkish horn-coloured below; feet dusky grey; iris brown.

I only met with these birds at Kambove. All of them were shot sitting on the heads of some long grasses in broken country.

193. *BATIS MOLITOR.*

Batis molitor (Hahn & Küster); Neave, loc. cit. p. 54.

No. 1. ♀ juv. Between Broken Hill and Kapopo, 4000 ft., Jan. 5, 1907.

Bill and feet black; iris outwardly yellowish, inwardly whitish.

No. 14. ♂ ad. Kambove, 4500 ft., Feb. 9, 1907.

Bill and feet black; iris outwardly golden brown, inwardly sulphur-yellow.

No. 163. ♂. Lualaba R., 2500 ft., May 2, 1907.

Bill and feet black; iris orange-yellow.

No. 271. ♀. Kambove, 4500 ft., July 4, 1907.

Bill and feet black; iris sulphur-yellow, becoming brown outwardly.

No. 639. ♀. Lofu R., L. Tanganyika, Aug. 4, 1908.

Bill and feet black; iris pale yellow.

No. 724. ♀. Kalungwisi R., Sept. 14, 1908.

Bill and feet black; iris sulphur-yellow.

An extremely common species in woodland country. One pair at least accompanies every bird-party.

194. *PLATYSTIRA JACKSONI*.

Platystira jacksoni Sharpe; Neave, loc. cit. p. 55.

No. 32. ♀. Kambove, 4500 ft., Feb. 15, 1907.

Bill and feet black; iris dark amethystine; wattle crimson.

No. 33. ♂. Kambove, Feb. 15, 1907.

Bill and feet black; iris dark amethystine; wattle crimson.

No. 139. ♀. Dikulwe R., 4000 ft., April 3, 1907.

Bill black; feet dusky; iris dark brown; wattle, upper scarlet, lower dusky brown.

No. 196. ♀. Upper Lualaba R., 3500 ft., May 20, 1907.

Bill black; feet dusky, legs dark purplish; iris dark brown; wattle red.

No. 556. ♀. Edge of Chimpili Plateau, N. of Bangweolo, June 9, 1908.

Bill black; feet dusky; iris brown; wattle scarlet.

No. 657. ♂. Lofu R., Aug. 10, 1908.

Bill and feet black; iris dark brown; wattle, upper scarlet, lower dark brown.

This bird is confined to dense bush and thickets near water. It is usually seen in pairs and has a peculiarly harsh grating note. It is tame and somewhat inquisitive. I only saw one individual in the Luangwa Valley, but whether it belonged to this species or to the closely allied *P. peltata* Sundevo. I am unable to say.

195. *SMITHORNIS CAPENSIS*.

Smithornis capensis (Smith); Neave, loc. cit. p. 55.

No. 108. ♂. Dikulwe R., 4000 ft., March 23, 1907.

Bill black, lower mandible white; feet greenish yellow; iris grey-brown.

No. 352. ♀. Bunkeya R., 3000 ft., Sept. 1, 1907.

Bill black, lower mandible white; feet pale olive-yellow; iris brown.

This bird, though not rare, is seldom seen. It frequents very dense bush on the banks of streams.

196. *ERYTHROCERCUS LIVINGSTONII*.

Erythrocerus livingstonei Finsch & Hartl.; Neave, loc. cit. p. 56.

This bird does not appear to pass the Mchinga Escarpment, as I never met with it elsewhere.

197. *TROCHOCERCUS VIVAX*. (Plate I.)

Trochocercus vivax Neave, Ann. N. H. (8) vol. iv. p. 129 (1909).

This species resembles *T. bivittatus* Reich., but has no white wing-patch. The sides of the body are ashy grey, with the breast and the abdomen white.

Total length about 6.1 inches; culmen 0.7; wing 2.75; tail 3.2; tarsus 0.75.

No. 121. ♂ juv. Dikulwe R., 4000 ft., March 29, 1907.

Bill dusky, lower mandible blue-grey; feet blue-grey; iris very dark brown.

No. 341. ♀ ad., type. Bunkeya R., 3000 ft., Aug. 30, 1907.

Bill dark blue, tip of upper mandible black; feet lead-coloured; iris dark reddish brown.

No. 353. ♂ ad., type. Bunkeya R., 3000 ft., Sept. 1, 1907.

Bill bluish horn-coloured, dusky tip; feet bluish grey; iris brown.

This bird occurs sparingly in forest on streams and river-banks. It is very active and restless, but is rather shy, and if once alarmed disappears into the densest thickets.

198. *TCHITREA PLUMBEICEPS*.

Tchitrea plumbeiceps (Reich.); Neave, loc. cit. p. 56.

No. 105. ♀. Dikulwe R., 4000 ft., March 23, 1907.

Bill dusky, bluish horn-coloured at base; feet greyish blue; iris very dark brown.

No. 336. ♂. Bunkeya R., 3000 ft., Aug. 28, 1907.

Bill blue; feet lead-coloured; iris dark brown, orbit blue.

No. 360. ♀. Bunkeya R., Sept. 8, 1907.

Bill blue, tip dusky; feet blue-grey; iris dark brown; orbit blue.



West, Newman imp.

TROCHOCERCUS VIVAX, ♂ ♀.

No. 416. ♂. Lufupa R., 4000 ft., Oct. 28, 1907.

Bill bright blue; feet dark slate-coloured; iris brown, orbit bright blue.

No. 587. ♂ juv. Chishi Island, L. Bangweolo, June 26, 1908.

Bill bluish slate-coloured, tipped with dusky; feet dark bluish slate-coloured; iris dark brown, orbit dark blue.

No. 750. ♀. Chimpili Plateau, Luwingu, Sept. 25, 1908.

Bill blue-grey; feet bluish grey; iris dark brown, orbit blue.

This species is ubiquitous in woodland country.

199. *ELMINIA ALBICAUDA.*

Elminia albicauda Boc.; Neave, loc. cit. p. 57.

No. 77. ♂. Kambove, 4500 ft., March 4, 1907.

Bill and feet black; iris brown.

No. 517. ♂. Valley of Chambezi, 4000 ft., May 2, 1908.

Bill and feet black; iris dark brown.

No. 615. ♂. Luwingu, Chimpili Plateau, July 19, 1908.

Bill and feet black; iris brown.

No. 630. ♀. Upper Kalungwisi Valley, July 29, 1908.

Bill and feet black; iris brown.

A common High Plateau species in woodland and on stream-banks. It is very tame.

Fam. CAMPOPHAGIDÆ.

200. *CORACINA PECTORALIS.*

Coracina pectoralis (Jard. & Selb.); Neave, loc. cit. p. 57.

Nos. 194, 195. ♂ ♀ imm. Upper Lualaba R., 3500 ft., May 19, 1907.

Bill and feet black; iris dark brown.

No. 236. ♂. Upper Lufira R., 3500 ft., June 15, 1907.

Bill and feet black; iris dark brown.

This bird is not uncommon in woodland country, but is rather shy. On the wing it looks like a cuckoo or small hawk.

Young males appear to resemble the female in having a white throat.

201. *CAMPOPHAGA NIGRA.*

Campophaga nigra (Vieill.); Neave, loc. cit. p. 58.

No. 111. ♂. Dikulwe R., 4000 ft., March 24, 1907.

Bill and feet black; gape yellow; iris brown.

No. 173. ♀. Lualaba R., 2600 ft., April 6, 1907.

Bill dusky brown; feet black; iris dark brown.

No. 233. ♀. Upper Lufira R., 3500 ft., June 13, 1907.

Bill and feet black; iris dark brown.

No. 653. ♀. Lofu Valley, Aug. 10, 1908.

Bill and feet black; iris dark brown.

No. 472. ♂. Lundazi R., Upper Luangwa Valley, March 3, 1908.

Bill black, gape bright orange; feet black; iris dark brown.

Not uncommon, but often overlooked on account of its retiring habits.

202. *CAMPOPHAGA QUISCALINA.*

Campophaga quiscalina Finsch; Reich. loc. cit. vol. ii. p. 520.

No 51. ♀. Kambove, 4500 ft., Feb. 22, 1907.

Bill black; feet dusky; iris dark brown.

This specimen, which I assign with some doubt to *C. quiscalina*, was shot in a small patch of dense forest. The species was not observed elsewhere.

Fam. PYCNONOTIDÆ.

203. *ANDROPADUS ZOMBENSIS.*

Andropadus zombensis Shelley; Sharpe, Hand-l. Birds, vol. iii. p. 324.

Andropadus virens zombensis Reich. loc. cit. vol. iii. p. 413.

No. 182. ♀. Junction of Lufupa and Lualaba Rivers, 2800 ft., May 11, 1907.

Bill and feet brown; iris brown.

Nos. 554, 555. ♂ ♀. Edge of Chimpili Plateau, N. o L. Bangweolo, June 8, 1908.

Bill very dark brown; feet yellowish brown; iris brown.

Nos. 558, 565. ♂ ♂. Edge of Chimpili Plateau, June 9, 11, 1908.

Bill dark brown ; feet olive-brown ; iris brown.

No. 681. ♂. Lofu Valley, Aug. 24, 1908.

Bill dusky ; feet brown ; tarsi paler ; iris brown.

No. 690. ♂. Lofu Valley, Aug. 27, 1908.

Bill dark brown ; feet brown ; iris dark brown.

This bird is not uncommon in "msitu" and in patches of forest on stream-banks. It has a singularly sweet song.

204. *ANDROPADUS OLEAGINUS*.

Andropadus oleaginus Peters ; Neave, loc. cit. p. 58.

This species is common in the Luangwa Valley, but seems to be absent from the High Plateau.

205. *CRINIGER SYLVICULTOR*.

Criniger sylvicultor Neave, Ann. N. H. (8) vol. iv. p. 130 (1909).

This bird is allied to *C. cabanisi* Sharpe, but is distinctly paler, the throat and entire breast being pale sulphur-yellow, the fore-neck olive washed with sulphur-yellow. The bill is also longer and stronger than that of *C. cabanisi*.

Total length about 7 inches ; culmen 0·85 ; wing 3·65 ; tail 3·6 ; tarsus 1·05.

No. 46. ♂. Kambove, 4500 ft., Feb. 21, 1907.

Bill dusky horn-coloured, paler below ; feet greyish tinted yellow ; iris dusky.

No. 132. ♂. Dikulwe R., 4000 ft., April 1, 1907.

Bill dusky horn-coloured, paler below ; feet pale greyish ; iris olive-grey.

No. 340. ♂. Bunkeya R., 3000 ft., Aug. 30, 1907.

Bill dusky horn-coloured, lower mandible much paler ; feet grey ; iris olive-brown.

No. 363. ♀. Bunkeya R., 3000 ft., Sept. 10, 1907.

Bill brownish horn-coloured, paler below ; gape yellow ; feet greenish grey ; iris greyish olive.

No. 557. ♀. Edge of Chimpili Plateau, N. of L. Bangweolo, June 9, 1908.

Bill brownish, paler below ; feet grey ; iris yellowish brown.

No. 679. ♂. Lofu Valley, L. Tanganyika, Aug. 24, 1908.

Bill dusky, paler below; feet greenish grey; iris brown.

No. 731. ♂. Kalungwisi Valley, Sept. 17, 1908.

Bill brownish horn-coloured, lower mandible paler; feet greenish slate-coloured; iris pale olive-brown.

No. 747. ♀. Machinga Plateau, Kalungwisi district, Sept. 23, 1908.

Bill greyish horn-coloured, base of lower mandible paler; feet pale slate-coloured; iris pale greyish brown.

This species of *Criniger* is not uncommon in dense forest within the Congo basin. It has a rather harsh croaking note.

206. PHYLLOSTROPHUS OCCIDENTALIS.

Phyllostrophus occidentalis (Sharpe); Reich. loc. cit. vol. iii. p. 397.

No. 153. Kaluli R., Lualaba Valley, April 27, 1907.

Bill dark greyish brown; feet slate-coloured; iris red-brown.

207. PHYLLOSTROPHUS CERVINIVENTRIS.

Phyllostrophus cerviniventris Shelley; Reich. loc. cit. vol. iii. p. 403.

No. 339. ♀. Bunkeya R., 3000 ft., Aug. 30, 1907.

Bill brownish horn-coloured, lower mandible paler, especially at base; feet flesh-coloured; iris golden brown.

No. 347. ♀. Bunkeya R., Aug. 31, 1907.

Bill brownish horn-coloured, lower mandible much paler; feet flesh-coloured; iris golden.

No. 692. ♂. Kalungwisi Valley, Sept. 3, 1908.

Bill brownish horn-coloured, base of lower mandible flesh-coloured; feet flesh-coloured; iris salmon-orange.

No. 732. ♀. Kalungwisi Valley, Sept. 17, 1908.

Bill brownish horn-coloured, base of lower mandible paler; feet flesh-coloured; iris orange.

208. PHYLLOSTROPHUS PALLIDIGULA.

Xenocicla pallidigula, Sharpe; Ibis, 1898, p. 146.

Phyllostrophus flavigula pallidigula Reich. loc. cit. vol. iii. p. 395.

No. 227. ♀. Upper Lufira R., 3500 ft., June 12, 1907.

Bill black; feet dark greyish brown; iris pale yellow-brown.

No. 259. ♀. Kambove, 4500 ft., July 1, 1907.

Bill black; feet dusky; iris yellow-brown.

No. 277. ♀. Kambove, July 10, 1907.

Bill black; feet dark grey; iris hazel.

No. 372. ♀. Plateau near Upper Lualaba R., 4000 ft.,
Sept. 24, 1907.

Bill black; feet dark olive-brown; iris orange-brown.

No. 384. ♂. Upper Lufupa R., 4000 ft., Oct. 3, 1907.

Bill dark brown; feet dark brown; iris yellowish brown.

No. 406. ♀. Lubudi R., 3800 ft., Oct. 19, 1907.

Bill black; feet dusky olive; iris golden brown.

No. 778. ♂. E. shore of L. Bangweolo, Oct. 16, 1908.

Bill dusky; feet dusky olive; iris ochre-yellow.

No. 802. ♀. Mansya R., Mpika Plateau, 4500 ft., Oct. 29,
1908.

Bill black; feet slate-coloured; iris yellowish brown.

A common forest species. The specimens recorded by Shelley from Zomba as *P. flavigula* should, I think, be really attributed to this species.

209. PHYLLOSTROPHUS STREPITANS.

Phyllostrophus strepitans (Reich.); Neave, loc. cit. p. 59.

No. 460. ♀. Petauke, Luangwa Valley, Jan. 10, 1908.

Bill brownish horn-coloured, paler below; feet greyish brown; iris reddish brown.

This bird is common in the Luangwa Valley, but I never met with it west of the Mchinga Escarpment.

210. PYCNONOTUS LAYARDI.

Pycnonotus layardi Gurney; Neave, loc. cit. p. 59.

No. 66. Kambove, 4500 ft., Feb. 28, 1907.

Bill and feet black; iris brown.

No. 104. ♂. Dikulwe R., 4000 ft., March 21, 1907.

Bill and feet black; iris dark brown.

No. 381. ♂. Lufupa R., 4000 ft., Oct. 2, 1907.

Bill and feet black; iris dark brown.

This species seems to be ubiquitous and always common.

Fam. TIMELIIDÆ.

211. CRATEROPUS HARTLAUBI.

Crateropus hartlaubi Bocage; Neave, loc. cit. p. 61.

No. 320. ♀. Bunkeya R., 3000 ft., Aug. 13, 1907.

Bill black; legs olive; iris bright crimson.

No. 325. ♀. Bunkeya R., Aug. 15, 1907.

Bill black; feet very dark olive; back of tarsus much paler.

No. 335. ♂. Bunkeya R., Aug. 28, 1907.

Bill black; feet dark olive-grey, legs paler; iris orange-scarlet.

No. 452. ♀. Near Serenje, N.E. Rhodesia, 4500 ft., Dec. 19, 1907.

Bill black; feet dull slate-coloured; tarsi pale greyish; iris blood-red.

No. 700. ♀. Kalungwisi R., Sept. 7, 1908.

Bill black; feet greyish horn-coloured; iris scarlet, with an inner line of orange.

This bird replaces *C. kirki* west of the Mchinga Escarpment. It is usually found on the banks of streams in rather open country and is shy.

212. CRATEROPUS KIRKI.

Crateropus kirki Sharpe; Neave, loc. cit. p. 60.

This species is not uncommon in the Luangwa Valley, but I never met with it west of the Mchinga Escarpment.

213. CRATEROPUS TANGANJICÆ.

Crateropus tanzanica Reich. loc. cit. vol. iii. p. 663.

No. 49. Kambove, 4500 ft., Feb. 22, 1907.

Bill black; feet greenish grey; iris orange-yellow, outwardly scarlet.

No. 58. Kambove, 4500 ft., Feb. 25, 1907.

Bill black; feet dusky grey, legs paler; iris orange, outwardly scarlet.

Nos. 216, 217. ♂ ♀. Upper Lualaba R., 3600 ft., May 30, 1907.

Bill black; feet brownish; legs brownish grey; iris orange, outwardly scarlet.

No. 317. ♂. Bunkeya R., 3000 ft., Aug. 11, 1907.

Bill black; feet dusky; iris orange, becoming outwardly scarlet.

Nos. 727, 728. ♀ ♂. Kalungwisi R., Sept. 16, 1908.

Bill black; feet greyish horn-coloured, tarsi paler; iris scarlet, with an inner line of orange.

The recently described *C. carruthersi* of Grant seems to be doubtfully distinct from this species.

C. tangajica is a common bird in small parties throughout the country in the Congo basin. It has much the same habits as *C. hartlaubi*.

214. *NEOCICHLA KELLENI*.

Neocichla kelleni Büttik. Notes Leiden Museum, x. p. 229, pl. 9. fig. 1 (1888).

Neocichla gutturalis (partim) Reich. loc. cit. vol. iii. p. 678.

No. 470. ♀. Luangwa Valley, 2000 ft., Feb. 27, 1908.

Bill dusky horn-coloured, base and gape orange-yellow; feet brown; iris bluish grey.

I only met with this very rare bird on one occasion. I found a party of about twenty in Mopane forest. They were rather shy, and it took me nearly two hours before I could get within gunshot. In flight they much resembled *Prionops talacoma*, but they have a chattering note more like that of a *Crateropus*.

Although both Reichenow and Sharpe agree in treating this bird as the young of *N. gutturalis* Sharpe, I am a little doubtful about it, as all the examples that I saw appeared to be heavily spotted, as shown in the figure of *N. kelleni*.

Fam. TURDIDÆ.

215. *MERULA TROPICALIS*.

Merula tropicalis (Peters); Neave, loc. cit. p. 61.

No. 61. ♂. Kambove, 4500 ft., Feb. 25, 1907.

Bill orange; feet light orange; iris dark brown; orbit orange-brown.

No. 81. ♂? Dikulwe R., 4000 ft., March 14, 1907.

Bill orange; feet pale orange-brown; iris brown, orbit orange-brown.

No. 142. ♂. Kaluli R., Lualaba Valley, 3000 ft., April 18, 1907.

Bill orange; feet pale orange-yellow; iris brown, orbit yellow.

No. 231. ♀. Upper Lufira R., 3500 ft., June 13, 1907.

Bill orange; feet yellow-brown; iris dark brown, orbit yellow-brown.

No. 445. ♂ juv. Near Serenje, N.E. R., 4500 ft., Dec. 17, 1907.

Bill dirty yellow; feet dirty flesh-coloured; iris brown, orbit brownish yellow.

No. 534. ♂. Chambezi R., May 12, 1908.

Bill orange; feet orange-yellow; iris brown, orbit orange.

This bird is not uncommon throughout the country. Like all the Thrushes, away from human habitation, it is rather shy. It usually frequents the thickets on the large termite-mounds, in the woodland.

216. *Turdus stormsi*.

Turdus stormsi Hartl.; Reich. loc. cit. vol. iii. p. 694.

No. 350. ♀. Near Bunkeya R., 3400 ft., Sept. 1, 1907.

Bill orange-yellow, dusky brown over nostrils; feet dirty whitish; iris brown.

No. 553. ♂. Edge of Chimpili Plateau, N. of L. Bangweolo, June 8, 1908.

Bill dull orange; feet pale dull yellowish; iris brown.

No. 696. ♂. Kalungwisi Valley, Sept. 5, 1908.

Bill orange-yellow; feet greyish flesh-coloured; iris brown.

I found this Thrush not uncommon but extremely shy. I only met with it in dense forest near water. It has an alarm-note hardly distinguishable from that of the Common Blackbird (*T. merula*).

217. *Geocichla litsipsirupa stierlingi*.

Geocichla litsipsirupa stierlingi Reich. loc. cit. vol. iii. p. 680.

Nos. 133, 134. ♂ ♀. Dikulwe R., 3500 ft., April 2, 1907.

Bill dark brown, lower mandible orange-yellow tipped brown ; feet pale dirty yellowish ; iris brown.

No. 207. ♀. Upper Lualaba R., 3500 ft., May 22, 1907.

Bill brownish horn-coloured, lower mandible orange-yellow tipped brownish ; feet yellowish brown, legs much paler ; iris dark brown.

No. 540. ♂. Luena, N. of L. Bangweolo, May 28, 1908.

Bill dark brown above, lower mandible and gape yellow, the tip brown ; feet pale yellow ; iris dark brown.

These birds have decidedly darker crowns than the typical *G. litsipsirupa*, but the other characters given by Reichenow seem hardly constant. I found it a rather scarce and shy bird.

218. PETROPHILA ANGOLENSIS.

Petrophila angolensis (Sousa) ; Neave, loc. cit. p. 61.

No. 36. ? Kambove, 4500 ft., Feb. 16, 1907.

Bill black ; feet dusky olive ; iris darker brown.

No. 419. ♂. Lufupa R., Oct. 29, 1907.

Bill black ; feet dusky brown ; iris dark brown.

No. 621. ♂. Luwingu, N. of L. Bangweolo, July 21, 1908.

Bill and feet black ; iris brown.

No. 419 is a very worn specimen, the black tips to the feathers on the dorsal surface having almost entirely disappeared.

This seems to be everywhere a scarce bird. It usually frequents wooded hill-sides.

219. COSSYPHA BOCAGEI.

Cossypha bocagei Finsch & Hartl. ; Neave, loc. cit. p. 62.

No. 47. ♂? Kambove, 4500 ft., Feb. 21, 1907.

Bill brownish horn-coloured, paler below ; feet brownish grey ; iris dark brown.

No. 369. ♀. Plateau near Upper Lualaba, 4500 ft., Sept. 24, 1907.

Bill dusky brown, base of lower mandible paler ; feet pale grey ; iris brown ?

Nos. 715, 716. ♀ ♂. Kalungwisi R., Sept. 10, 1908.

Bill black ; feet greyish olive ; iris dark brown.

This bird frequents dense forest only, and being extremely shy is difficult to shoot. It has a musical but penetrating note.

220. *COSSYPHA HEUGLINI*.

Cossypha heuglini Hartl. ; Neave, loc. cit. p. 62.

No. 56. ♂. Kambove, 4500 ft., Feb. 23, 1907.

Bill black ; feet pinkish brown ; iris brown.

No. 190. ♀. Upper Lualaba, 3500 ft., May 17, 1907.

Bill black ; feet grey-brown ; iris brown.

No. 333. ♀. Bunkeya R., 3000 ft., Aug. 22, 1907.

Bill black ; feet dusky olive ; iris brown.

This species is not confined to dense forest like the preceding. It is usually to be found in thickets, on old termite-mounds and river-banks. Except in the neighbourhood of human habitation, I have always found it very wary.

221. *COSSYPHA BARBATA*.

Cossypha barbata Finsch & Hartl. ; Neave, loc. cit. p. 63.

No. 16. ♀. Kambove, 4500 ft., Feb. 9, 1907.

Bill bluish dusky, base of lower mandible paler ; feet flesh-coloured ; iris dark brown.

No. 146. ♀. Kaluli R., Lualaba Valley, 2500 ft., April 19, 1907.

Bill dusky horn-coloured, base of lower mandible greyish ; feet pale flesh-coloured ; iris brown.

No. 209. ♂. Upper Lualaba, 3500 ft., May 23, 1907.

Bill black, base of lower mandible paler ; feet flesh-coloured ; iris brown.

No. 391. ♀. Lufupa R., 4000 ft., Oct. 11, 1907.

Bill dusky ; feet pale flesh-coloured ; iris brown.

No. 756. ♂. Near Luena, L. Bangweolo, Oct. 4, 1908.

Bill dusky, base of lower mandible whitish ; feet pale brownish flesh-coloured ; iris dark brown.

This bird differs from its allies in venturing much more into the open, and is consequently more easily obtained.

222. ERYTHROPYGIA ZAMBESIANA.

Erythropygia zambesiana Sharpe; Neave, loc. cit. p. 63.

No. 99. ♂. Dikulwe R., 4000 ft., March 20, 1907.

Bill dusky, lower mandible yellowish at base; feet pale flesh-coloured; iris brown.

No. 229. ♀. Upper Lufira R., 3500 ft., June 13, 1907.

Bill dusky, gape and base of lower mandible yellow; feet greyish flesh-coloured; iris dark brown.

No. 378. ♂. Upper Lufupa R., 4000 ft., Oct. 2, 1907.

Bill brownish horn-coloured, base of lower mandible and gape yellow; feet brownish flesh-coloured; tarsi paler; iris olive-brown.

No. 444. ♂. Near Serenje, N.E. Rhodesia, 4500 ft., Dec. 17, 1907.

Bill brown, base of lower mandible and gape yellow; feet greyish flesh-coloured; iris brown.

No. 518. ♂. Chambezi R., 4000 ft., May 4, 1908.

Bill dark brown, base of lower mandible and gape yellow; feet pale greyish flesh-coloured; iris dark brown.

No. 721. ♂. Kalungwisi R., Sept. 13, 1908.

Bill dusky, base of lower mandible and gape yellowish; feet pale olive-grey; iris brown.

This is a very shy and restless little bird. It is frequently to be found among thickets and long grasses on the edge of native gardens. Its song consists of a few penetrating notes constantly repeated.

223. MYRMECOCICHLA ARNOTTI.

Myrmecocichla arnotti (Tristr.); Ogilvie-Grant, Ibis, 1908, p. 299.

Thamnodia shelleyi Neave, loc. cit. p. 63.

No. 11. Kambove, 4500 ft., Feb. 6, 1907.

Bill and feet black; iris dark brown.

Nos. 59, 62. ♂ ♀. Kambove, Feb. 25, 1907.

Bill and feet black; iris brown.

No. 75. ♂. Kambove, March 4, 1907.

Bill and feet black; iris brown.

No. 95. ♂. Dikulwe R., 4000 ft., March 17, 1907.

Bill and feet black; iris brown.

This bird is common over a wide area in woodland country. It is usually found among the timber on the edge of an open space and seems to prefer the larger trees. The adult male is distinguished at a glance by its white crown and black throat, these colours being reversed in the female.

224. MYRMECOCICHLA NIGRA.

Myrmecocichla nigra (Vieill.); Ogilvie-Grant, Ibis, 1907, p. 299.

Nos. 22, 23. ♀ ♀. Kambove, 4500 ft., Feb. 11, 1907.

Nos. 24, 25. ♂ ♂. Kambove, 4500 ft., Feb. 12, 1907.

Bill and feet black; iris dark brown. The sexes are similar.

As Mr. Ogilvie-Grant has pointed out, this is quite a distinct bird from *M. arnotti*. It is, however, of interest to observe that at Kambove I obtained examples of both species, so that this would seem to be one of the few places where their ranges coincide.

This bird frequents much more open spots than does *M. arnotti*. The males are easily distinguishable in life from those of *M. arnotti*, owing to the fact that only the lesser and median wing-coverts are white, these being concealed when the bird is at rest; they then look entirely black.

225. PRATINCOLA TORQUATA.

Pratincola torquata (L.); Neave, loc. cit. p. 137.

No. 187. ♂. Upper Lualaba R., 3500 ft., May 16, 1907.

Bill and feet black; iris reddish brown.

No. 367. ♀. Upper Lualaba R., 3500 ft., Sept. 23, 1907.

Bill dusky; feet black; iris dark brown.

No. 572. ♂. Luena, N.E. of Bangweolo, June 13, 1908.

Bill and feet black; iris brown.

No. 757. ♂ juv. Luena R., Oct. 5, 1908.

Bill dusky, gape yellowish; feet black; iris brown.

This bird is common in the more open parts of the country.

226. SAXICOLA FALKENSTEINI.

Saxicola falkensteini Cab.; Neave, loc. cit. p. 64.

No. 433. ♂? Ruwe, 4500 ft., Nov. 7, 1907.

Bill brownish horn-coloured, somewhat paler below; feet dusky brown; iris dark brown.

This is a woodland species, found chiefly in hilly country. It lives in trees, but feeds on the ground.

227. CAMPICOLA PILEATA.

Campicola pileata (Seebohm); Neave, loc. cit. p. 66.

Nos. 203, 204. ♂ ♂. Upper Lualaba R., 3500 ft., May 22, 1907.

Bill and feet black; iris brown.

No. 758. ♂ juv. Luena R., L. Bangweolo, Oct. 6, 1908.

Bill brown above, yellow below; feet dusky greyish; iris brown.

Nos. 812, 821. ♂ juv. Mansya R., near Lake Young. Nov. 2 & 4, 1908.

Bill brown above, yellow tipped with brown below; feet dusky; iris brown.

A common open-country species. It is much attracted by freshly burnt ground.

Fam. SYLVIIDÆ.

228. ACROCEPHALUS SCHÆNOBÆNUS.

Acrocephalus schænobænus (L.); Reich. loc. cit. vol. iii. p. 588.

No. 45. ♀. Kambove, 4500 ft., Feb. 21, 1907.

Bill dusky; feet dirty greyish; iris brown.

This is a rare bird in Central Africa according to my experience.

229. ACROCEPHALUS BÆTICATUS.

Acrocephalus bœticatus (Vieill.); Reich. loc. cit. vol. iii. p. 587.

No. 447. ♂. Near Serenje, N.E. R., Dec. 18, 1907.

Bill dusky above, yellow below; feet greenish yellow; tarsi brownish; iris brown.

230. MELOCICHLA MENTALIS.

Melocichla mentalis (Fras.) ; Reich. loc. cit. vol. iii. p. 538.
No. 57. ♀. Kambove, 4500 ft., Feb. 23, 1907.

Bill blackish above, whitish below ; feet bluish slate-coloured ; iris brown.

No. 181. ♂. Junction of Lualaba and Lufupa Rivers, 3000 ft., May 11, 1907.

Bill dusky horn-coloured, lower mandible whitish tipped dusky ; feet dark greyish ; iris brown.

No. 390. ♀. Lufupa R., 4000 ft., Oct. 11, 1907.

Bill black above, whitish below ; feet slate-coloured ; iris orange-brown.

No. 761. ♂. E. of L. Bangweolo, Oct. 8, 1908.

Bill dusky, lower mandible greyish white ; feet slate-coloured ; iris reddish brown.

This bird is difficult to obtain, as on the slightest alarm it disappears into the long grasses in which it lives. It has a singularly sweet song.

231. CISTICOLA STOEHRl.

Cisticola stoehri Neave, loc. cit. p. 66.

I did not meet with this species again. It would therefore seem to be confined to the low ground of the Luangwa Valley.

232. CISTICOLA NANA.

Cisticola nana Fisch. & Reich. J. f. O. 1884, p. 260 ; Reich. loc. cit. vol. iii. p. 560.

No. 491. ♂. Chambezi Valley, 4000 ft., April 11, 1908.

Bill brownish horn-coloured, lower mandible whitish ; feet flesh-coloured ; iris reddish brown.

233. CISTICOLA RUFO-PILEATA.

Cisticola rufopileata Reich. ; Neave, loc. cit. p. 66.

No. 82. ♀ juv. Dikulwe R., 4000 ft., March 14, 1907.

Bill brownish horn-coloured above, orange below ; feet dull pinkish ; iris olive greyish.

No. 97. ♂. Dikulwe R., March 18, 1907.

Bill dusky, somewhat paler below ; feet pale pinkish brown ; iris yellow-brown.

No. 246. ♂. Upper Lufira R., 3500 ft., June 21, 1907.

Bill brownish horn-coloured, paler below; feet brownish flesh-coloured; iris orange-brown.

No. 413. ♂. Lufupa R., 4000 ft., Oct. 26, 1907.

Bill brownish horn-coloured, lower mandible and gape yellowish; feet flesh-coloured; iris yellow-brown.

No. 437. ♂. Valley of Luapula R., 4000 ft., Dec. 6, 1907.

Bill black; feet pinkish brown; iris orange-brown.

234. *CISTICOLA SYLVIA*.

Cisticola sylvia Reich.; Neave, loc. cit. p. 66.

No. 137. ♀. Dikulwe R., 4000 ft., April 3, 1907.

Bill horn-brown, whitish below; feet pinkish flesh-coloured; iris yellow-brown.

No. 230. Juv. Upper Lufira R., 3500 ft., June 13, 1907.

Bill dusky, gape and lower mandible orange-yellow; feet orange-yellow.

No. 247. ♂. Upper Lufira R., June 21, 1907.

Bill brownish horn-coloured, lower mandible and gape yellow; feet yellow; iris olive-grey.

No. 315. ♀. Bunkeya R., 3000 ft., Aug. 8, 1907.

Bill yellow, culmen dark brown; feet yellow; iris pale olive-grey.

Nos. 660, 661. ♂♂. Lofu R., Aug. 13, 1908.

Bill dusky, whitish below; feet pale brownish flesh-coloured; iris reddish brown.

No. 670. ♀. Lofu R., Aug. 16, 1908.

Bill dusky, pale pink below; feet pale brownish flesh-coloured; iris reddish brown.

No. 694. ♂. Kalungwisi Valley, Sept. 4, 1908.

Bill brownish horn-coloured, lower mandible flesh-coloured; feet yellowish flesh-coloured; iris yellowish brown.

235. *CISTICOLA RUFA*.

Cisticola rufa (Fras.); Reich. loc. cit. vol. iii. p. 567.

No. 578. Luena, June 20, 1908.

Bill brownish, yellow below; feet yellowish; iris brown.

No. 645. ♀. Lofu R., Aug. 7, 1908.

Bill black, orange-yellow below ; feet yellowish brown ; iris olive-brown.

No. 714. ♂. Kalungwisi Valley, Sept. 10, 1908.

Bill brownish horn-coloured, yellow below ; feet yellowish flesh-coloured ; iris olive-grey.

No. 720. ♀. Kalungwisi R., Sept. 11, 1908.

Bill brownish horn-coloured, yellow below ; feet yellow ; iris greyish olive.

No. 726. ♂. Kalungwisi R., Sept. 16, 1908.

Bill brown, yellow below ; feet pale yellowish ; iris greyish olive.

Nos. 767, 773. ♀ ♀. East of L. Bangweolo, Oct. 13, 15, 1908.

Bill brown, orange-yellow below ; feet yellowish flesh-coloured ; iris olive-brown.

Nos. 788, 793. ♂ ♂. Chambezi Valley, Oct. 24, 25, 1908.

Bill brownish, yellow below ; feet yellowish flesh-coloured ; iris olive-grey.

A fairly common species, usually found on the edges of forest.

236. *CISTICOLA TERRESTRIS*.

Cisticola terrestris (A. Smith) ; Reich. loc. cit. vol. iii. p. 558.

No. 705. ♂. Kalungwisi R., Sept. 9, 1908.

Bill brownish horn-coloured, flesh-coloured below ; feet flesh-coloured ; iris olive-brown.

Nos. 738, 744. ♂ ♀. Machinga Plateau, Kalungwisi district, Sept. 19, 20, 1908.

Bill brownish horn-coloured, flesh-coloured below ; feet flesh-coloured ; iris olive-grey.

No. 791. ♂. Lower Chambezi Valley, Oct. 25, 1908.

Bill dusky ; feet yellowish flesh-coloured ; iris orange-brown.

Nos. 815, 825. ♂ ♂. Mansya R., L. Young, Nov. 2, 5, 1908.

Bill brownish horn-coloured ; feet brownish flesh-coloured ; iris yellowish brown.

I met with this little bird only on the larger plains. It has a weak bobbing flight.

237. *CISTICOLA STRANGII*.

Cisticola strangei (Fras.); Reich. loc. cit. vol. iii. p. 544.

No. 12. ♂ ad. Kambove, 4500 ft., Feb. 8, 1907.

Bill dusky, paler below; feet pinkish brown; iris yellow-brown.

No. 70. Kambove, March 1, 1907.

Bill dusky, whitish below; feet pale salmon-brown; iris brown.

No. 240. ♀? Upper Lufira R., 3600 ft., June 17, 1907.

Bill dark brown, gape and lower mandible yellow; feet fawn-brown; iris olive-brown.

No. 294. ♀. Bunkeya R., 3000 ft., July 29, 1907.

Bill brownish horn-coloured, lower mandible flesh-coloured; feet brownish flesh-coloured; iris yellow-brown.

No. 356. ♂. Plateau near Lualaba R., 4000 ft. Sept. 23, 1907.

Bill brownish horn-coloured, paler below; feet flesh-coloured; tarsi paler; iris pale olive-yellow.

No. 611. ♂. Luwingu, July 17, 1908.

Bill dark brownish horn-coloured, base of lower mandible white; feet pinkish brown; iris brown.

No. 640. ♀. Lofu R., Aug. 6, 1908.

Bill dusky, fleshy horn-coloured below; feet brownish flesh-coloured; iris pale yellowish brown.

No. 703. ♂. Kalungwisi R., Sept. 8, 1908.

Bill brownish horn-coloured, whitish below; feet pale brownish flesh-coloured; iris brown.

No. 729. ♀. Kalungwisi R., Sept. 16, 1908.

Bill brownish horn-coloured, lower mandible flesh-coloured; feet pale yellowish brown; iris yellow-brown.

No. 774. ♂. E. of L. Bangweolo, Oct. 16, 1908.

Bill brownish horn-coloured, paler below; feet brownish flesh-coloured; iris golden brown.

238. *CISTICOLA LUGUBRIS*.

Cisticola lugubris Rüpp.; Reich. loc. cit. vol. iii. p. 552.

Nos. 328, 329. ♂ ♂. Bunkeya R., 3000 ft., Aug. 20, 1907.

Bill horn-brown, whitish at base of lower mandible; feet pale pinkish brown; iris red-brown.

No. 331. ♀. Bunkeya R., 3000 ft., Aug. 21, 1907.

Bill brownish horn-coloured, paler below; feet pale pinkish brown; iris reddish brown.

No. 780. ♂. E. of L. Bangweolo, Oct. 17, 1908.

Bill dusky; feet brownish flesh-coloured; iris reddish brown.

I found this Warbler decidedly local and only in very open country.

239. *SCHÆNICOLA APICALIS*.

Schœnicola apicalis (Cab.); Reich. loc. cit. vol. iii. p. 577.

No. 418. Lufupa R., 4000 ft., Oct. 29, 1907.

Bill dark brown above, whitish below; feet pale brown; iris olive-brown.

No. 450. ♂. Near Serenje, N.E. R., 4500 ft., Dec. 19, 1907.

Bill black, blue-grey below; feet pale greyish brown; iris olive-brown.

No. 451. ♂. Near Serenje, Dec. 19, 1907.

Bill black above, lower mandible blue-grey, base dusky; feet pale greyish brown; iris brown.

No. 609. ♂. Luena, July 15, 1908.

Bill dark bluish grey, whitish below; feet pale brownish; iris brown.

Not uncommon on open grassy plains and swamps, but difficult to shoot.

240. *BRADYPTERUS MSIRI*.

Bradypterus msiri Neave, Bull. B. O. C. xxv. p. 25 (1909).

This species differs from *B. nyassæ* Shelley, in its dull chestnut-brown colouring above, its dusky brown head, and faintly indicated buff eyebrows: it is also distinguished by its white throat and chest, and the chestnut colour of the sides of the body and under tail-coverts. It has also a longer and more slender bill. Total length 5·2 inches; culmen 0·57; wing 2·1; tail 2·7; tarsus 0·7.

No. 364. ♀ type. Bunkeya R., 3000 ft., Sept. 13, 1907.

Bill brownish horn-coloured, paler below at base; feet dull flesh-coloured; iris brownish.

This bird was obtained close to the site of the ruins of the chief village of Msiri, the former chief by conquest over a large region in this neighbourhood.

241. CALAMONASTES KATANGÆ.

Calamonastes katangæ Neave, Ann. N. H. (8) vol. iv. p. 130 (1909).

Allied to *C. cinereus*, but a browner bird; the breast and abdomen white, the throat white mottled with brownish; the fore-neck ashy, forming a broad band. Total length about 4.1 inches; culmen 0.55; wing 2.3; tail 1.7; tarsus 0.8.

In the young bird, no. 92, the under surface is yellowish.

No. 92. Dikulwe R., 4000 ft., March 16, 1907.

Bill black; feet pinkish; iris golden brown, orbit brown.

No. 122. ♂. Dikulwe R., 4000 ft., March 29, 1907.

Bill dusky; feet pale flesh-coloured; iris and orbit reddish brown.

No. 223. ♀. Upper Lualaba R., 3500 ft., May 31, 1907.

Bill dusky, base of lower mandible paler; feet yellowish flesh-coloured; iris and orbit yellow-brown.

No. 429. ♀. Lufupa R., 3500 ft., Nov. 3, 1907.

Bill black; feet yellowish flesh-coloured; iris and orbit reddish brown.

No. 519. ♂. Chambezi R., 4000 ft., May 4, 1907.

Bill dusky; feet flesh-coloured; iris chestnut-brown.

I found this bird not rare but retiring and easily overlooked. It is particularly fond of the dense thickets which are found in the woodland, on the top of large termite-mounds.

242. SYLVIA SIMPLEX.

Sylvia simplex Lath.; Neave, loc. cit. p. 67.

No. 814. ♂. L. Young, Nov. 2, 1908.

Bill brownish horn-coloured, base of lower mandible paler; feet brown; iris brown.

243. PHYLLOSCOPUS TROCHILUS.

Phylloscopus trochilus (L.) ; Reich. loc. cit. vol. iii. p. 644.
No. 395. ♂. Lufupa R., 4000 ft., Oct. 12, 1907.

Bill brownish horn-coloured, paler below ; feet dark olive-brown ; iris dark brown.

No. 396. ♀. Lufupa R., Oct. 12, 1907.

Bill brownish horn-coloured, paler below ; feet olive-yellow ; iris dark brown.

No. 440. ♂. Near Serenje, N.E. Rhodesia, 4500 ft., Dec. 16, 1907.

Bill brownish, base of lower mandible yellow ; feet yellow-brown ; tarsi dark olive-brown.

No. 784. ♂. E. of L. Bangweolo, Oct. 20, 1908.

Bill brownish, paler below ; feet yellowish brown ; iris brown.

No. 789. ♂. Chambezi R., Oct. 24, 1908.

Bill brownish, base of lower mandible and gape yellow ; feet olive-brownish ; iris dark brown.

The Willow-Wren appears in fair numbers about October towards the beginning of the rains. It is usually seen in pairs or small parties.

244. APALIS FLORISUGA.

Apalis florisuga (Reich.) ; Neave, loc. cit. p. 67.

I did not meet with this Luangwa Valley bird anywhere west of the Mchinga Escarpment.

245. DRYODROMAS PEARSONI. (Plate II.)

Dryodromas pearsoni Neave, Ann. N. H. (8) vol. iv. p. 130 (1909).

This very distinct little species is allied to *D. rufifrons*, with some points of resemblance to *Prinia moelleri* Boc. The most noticeable point is the long black tail of the bird, the feathers of which have ashy tips ; crown ferruginous, back reddish olive, rump and upper tail-coverts ashy ; under surface white, the throat and fore-neck being tinged with pale fawn ; flanks ashy.

Total length 4.1 inches ; culmen 0.45 ; wing 2.0 ; tail 2.0 ; tarsus 0.65.



West, Newman imp.

DRYODROMAS PEARSONI, ♂ ♀.

No. 417. ♀. Lufupa R., 4000 ft., Oct. 28, 1907.

Bill brownish horn-coloured, base of lower mandible paler ; feet brownish flesh-coloured ; iris yellowish brown.

No. 422. ♂, type. Lufupa R., Oct. 30, 1907.

Bill brownish horn-coloured, lower mandible pink ; feet brownish flesh-coloured ; iris yellow-brown.

No. 423. ♀. Lufupa R., Oct. 30, 1907.

Bill brownish horn-coloured, base of lower mandible pink ; feet yellowish flesh-coloured ; iris yellow-brown.

This striking little bird I found not uncommon on the Upper Lufupa River, usually in pairs. It is very conspicuous on the wing, with its reddish head, white under parts, and black tail. It inhabits rather *tall* trees, not' bushes, in the woodland, and flies with a loud clicking exactly as if it were going by clockwork.

246. EREMOMELA POLIOXANTHA.

Eremomela polioxantha Sharpe ; Neave, loc. cit. p. 68.

No. 186. ♀. Lualaba R., 3200 ft., May 14, 1907.

Bill dusky brown, paler below ; feet dusky ; iris brown.

No. 211. ♂. Upper Lualaba R., 3000 ft., May 25, 1907.

Bill dusky brown, slightly paler below ; feet dusky ; iris orange-brown.

No. 377. ♂. Lufupa R., 4000 ft., Oct. 1, 1907.

Bill brownish horn-coloured, paler below ; feet dusky brown ; iris reddish brown.

No. 389. ♂ juv. Lufupa R., 4000 ft., Oct. 11, 1907.

Bill dusky ; feet dark blue-grey ; iris olive-grey.

No. 441. ♀. Near Serenje, N.E. Rhodesia, 4500 ft., Dec. 17, 1907.

Bill brown, lower mandible pinkish ; feet dark brown ; iris reddish brown.

No. 442. ♂ juv. Near Serenje, Dec. 17, 1907.

Bill brownish ; feet grey ; iris dark brown.

No. 617. ♂. Luwingu, July 20, 1908.

Bill dusky ; feet black ; iris reddish brown.

247. EREMOMELA PULCHRA.

Eremomela pulchra (Boc.) ; Neave, loc. cit. p. 68.

No. 37. ♀. Kambove, 4500 ft., Feb. 16, 1907.

Bill black ; feet dusky, tarsi dull brownish ; iris bright yellow, shading to brownish yellow externally.

No. 239. ♂. Upper Lufira R., 3500 ft., June 16, 1907.

Bill black, base of lower mandible greyish ; feet yellowish brown ; tarsi ash-coloured.

No. 438. ♂. Near Serenje, N.E. Rhodesia, Dec. 15, 1907.

Bill black ; feet pinkish brown, tarsi darker ; iris pale sulphur-yellow, orbit brown.

No. 514. ♀. Chambezi Valley, 4000 ft., May 1, 1908.

Bill dusky ; feet pale brownish ; iris pale yellow.

No. 550. ♂. Upper Luansenshi R., June 4, 1908.

Bill black ; feet pale brown ; iris pale yellow.

No. 620. ♂. Luwingu, July 21, 1908.

Bill black ; feet pale yellowish brown ; iris pale yellow.

Nos. 643, 644. ♂ ♀. Lofu R., Aug. 6, 1908.

Bill black ; feet yellowish brown ; tarsi darker ; iris pale yellow.

No. 648. ♂. Lofu R., Aug. 8, 1908.

Bill black ; feet brownish yellow, tarsi darker ; iris pale yellow.

This is a common species in woodland country, and some individuals may be seen in nearly every bird-party.

248. EREMOMELA CANICEPS.

Eremomela caniceps (Cass.) ; Reich. loc. cit. vol. iii. p. 638.

No. 237. ♀. Bunkeya R., 3000 ft., Aug. 28, 1907.

Bill dusky ; feet brownish flesh-coloured ; iris and orbit yellowish brown.

This was the only individual met with. It was shot in a thicket on the bank of a stream.

249. EREMOMELA ATRICOLLIS.

Eremomela atricollis Boc. ; Reich. loc. cit. vol. iii. p. 642.

No. 110. Dikulwe R., 4000 ft., March 24, 1907.

Bill black ; feet orange-brown ; tarsi ash-coloured ; iris brown.

No. 238. ♀. Upper Lufira R., 3600 ft., June 16, 1907.

Bill black ; feet pale brown ; tarsi ash-coloured ; iris dark brown.

This bird has the same habits as *E. pulchra*, but is very much rarer.

250. CAMAROPTERA SUNDEVALLI.

Camaroptera sundevalli Sharpe ; Neave, loc. cit. p. 69.

No. 171. ♀. Lualaba R., 2500 ft., May 5, 1907.

Bill dusky brown, base of lower mandible pale pink ; feet pale flesh-coloured ; iris brown.

No. 260. ♂? Kambove, 4500 ft., July 1, 1907.

Bill brownish, base of lower mandible yellow ; feet pinkish ; iris and orbit reddish brown.

This species frequents dense bush on stream-banks &c. I did not meet with it in the woodland.

251. CAMAROPTERA GRISEOVIRIDIS.

Camaroptera griseoviridis (Müll.) ; Neave, loc. cit. p. 69.

This bird, though not uncommon in the Lower Luangwa Valley, does not appear to cross the Mchinga Escarpment.

252. EUPRINODES BRUNNEICEPS.

Euprinodes brunneiceps (Reich.).

Apalis cinerea (part.) Reich. loc. cit. vol. iii. p. 604.

No. 281. ♀. Kambove, 4500 ft., July 11, 1907.

Bill black ; feet brownish flesh-coloured ; iris yellow-brown.

The only specimen of this little-known bird obtained was shot in some dense forest on the bank of a stream.

Although Dr. Reichenow has united his *E. brunneiceps* with *A. cinerea* Sharpe, there would appear to be considerable grounds for keeping them distinct.

253. SYLVIELLA RUFICAPILLA.

Sylviella ruficapilla Boc. ; Reich. loc. cit. vol. iii. p. 630.

No. 18. ♂. Kambove, 4500 ft., Feb. 10, 1907.

Bill pinkish brown, paler below ; feet orange-brown ; iris pale yellow, orbit red-brown.

No. 175. ♂. Busanga, Lualaba R., 3000 ft., May 9, 1907.

Bill horn-brown ; feet pink ; iris orange-brown.

No. 237. ♂. Upper Lufira R., 3500 ft., June, 15, 1907.

Bill brownish, lower mandible somewhat paler ; feet brownish pink ; iris yellow-brown.

No. 425. ♀. Lufupa R., 4000 ft., Oct. 30, 1907.

Bill brownish horn-coloured, lower mandible paler ; feet flesh-coloured ; iris golden brown.

No. 439. ♀. Near Serenje, N.E. Rhodesia, 4500 ft., Dec. 16, 1907.

Bill brownish, paler below ; feet pinkish brown ; iris yellow-brown, orbit yellow-brown.

Met with solitary or in family-parties.

254. SYLVIELLA WHYTHI Shell.

Sylviella whythi Shell. ; Reich. loc. cit. vol. iii. p. 627.

No. 284. ♂. Lufira R., near Lukafu, 3000 ft., July 23, 1907.

Bill brownish horn-coloured, lower mandible pinkish horn-coloured ; feet reddish brown ; iris yellow-brown.

No. 446. ♂. Near Serenje, N.E. Rhodesia, 4000 ft., Dec. 18, 1907.

Bill dark brownish ; feet greyish flesh-coloured ; iris pale olive.

No. 770. ♂. E. of L. Bangweolo, Oct. 14, 1908.

Bill brownish, lower mandible flesh-coloured ; iris brownish flesh-coloured ; iris orange-brown.

This little bird is usually solitary and is seen systematically hunting for insects on low trees.

255. BURNESIA LEUCOPOGON.

Burnesia leucopogon (Cab.) ; Sharpe, Hand-l. Birds, vol. iv. p. 241.

Prinia leucopogon Reich. loc. cit. vol. iii. p. 595.

No. 394. ♂. Lufupa R., 4000 ft., Oct. 12, 1907.

Bill black ; feet fawn-brown ; iris reddish brown.

This individual was one of a party of five which were hunting for insects in a thicket on the edge of dense

forest. They were very noisy, maintaining an incessant harsh chatter.

The locality appears to indicate a considerable extension of the southward range of the species. It is one of the instances of the occurrence of western tropical birds in Katanga, especially in the western districts.

256. *PRINIA MYSTACEA.*

Prinia mystacea Rüpp.; Neave, loc. cit. p. 149.

No. 4. ♂ ad. Kapopo to Kansanshi, N.W. Rhodesia, 4000 ft., Jan. 19, 1907.

Bill black; feet pinkish brown; iris and orbit red-brown.

No. 15. ♂ ad. Kambove, 4500 ft., Feb. 9, 1907.

Bill black; feet pinkish brown; iris and orbit yellow-brown.

No. 266. ♂ ad. Kambove, 4500 ft., July 3, 1907.

Bill dusky, base of lower mandible paler; feet yellowish flesh-coloured; iris reddish brown.

No. 316. ♀. Bunkeya R., 3000 ft., Aug. 9, 1907.

Bill brownish horn-coloured, pinkish below; feet pinkish horn-coloured; iris bright reddish chestnut.

No. 330. ♀. Bunkeya R., Aug. 20, 1907.

Bill dusky, base of lower mandible paler; feet brownish flesh-coloured; iris reddish brown.

Nos. 618, 619. ♂ ♀. Luwingu, July 20, 1908.

Bill dusky, base of lower mandible whitish; feet yellowish flesh-coloured; iris yellow-brown.

Nos. 637, 638. ♂ ♀. Mporokoso, Aug. 2, 1908.

Bill dusky, base of lower mandible whitish; feet pinkish brown; iris yellowish brown.

No. 662. ♂. Lofu R., Aug. 13, 1908.

Bill dusky; feet pinkish brown; iris reddish brown.

No. 709. ♀. Luena R., Oct. 6, 1908.

Bill dusky; feet brownish flesh-coloured; iris reddish brown.

This is a common bird, which always seems to go in small parties.

[To be continued.]